

PREPPED DUST SAMPLE CASSETTE LABELS:

MAS JOB NUMBER: M1011CLIENT JOB NUMBER: A08-120.17, A08-120.15

SAMPLE NUMBER: LABEL:

13 - 2 A08-120.15 Oaks Mall - Gainesville, Fla.#2 - C-11 Store Front - top of sign A = 4 1/2" X 5"T = 1min 11-8-8814 - 3 A08-120.15 Oaks Mall, Gainesville, Fla #3 - A-16Store Front - Window ledge A = 9" X 9" T = 2min 11-8-8815 - #4 A08-120.15 Oaks Mall - Gainesville, Fla #4 NorthEntrance Clay Floor Tile A = 12" X 12" T = 2min 11-8-8816 - #5 A08-120.15 Oaks Mall, Gainesville, Fla #5 Center CourtBack of Directory A = 12" X 12" T = 2min 11-8-8817 - #6 A08-120.15 Oaks Mall - Gainesville, Fla. #6 D-9 StoreFront Top of Wood trim above stores 11-8-8818 - #7 A08-120.15 Oaks Mall, Gainesville, Fla #7 A-3Store front Top of Canopy A = 12" X 12" T = 2min 11-8-8819 - #8 A08-120.15 Oaks Mall - Gainesville, Fla. #8 Oak6 Theatres Top of sign A = 12" X 12" 11-8-8820 - #9 A08-120.15 Oaks Mall - Gainesville, Fla. #9 - Informationbooth Carpet on floor A = 12" X 12" T = 1min 11-8-88

OBJECT NAME: Law Assoc. / Presidential
 OBJECT NUMBER: M1811
 PE OF SAMPLES: DUST

DATE OF PREP: 6/25/89PREP TECH: JIASH: ☐TA: ☐DIRECT PREP TECHNIQUE: Mist Method

B I.D. #:	CLIENT I.D. #:	FILTER TYPE	VOLUME FILTERED NO. 1	VOLUME FILTERED NO. 2	VOLUME FILTERED NO. 3	TOTAL SUSPENSION VOLUME	COMMENTS:
11811-1	A88-120-17-1	47mm MCE	10ml			100ml	
11811-2	A88-120-17-2	"	3ml			100ml	
11811-3	A88-120-17-3	"	20ml			100ml	
11811-4	A88-120-17-4	"	30ml			100ml	
11811-5	A88-120-17-5	47mm MCE	1ml			100ml	1-5 done on 6/22/89
—	Lab Blank	"				100ml	Box 26
11811-6	A88-120-17-6	"	20ml			100ml	
11811-7	A88-120-17-7	"	20ml			100ml	
11811-8	A88-120-17-8	"	10 th 1ml			100ml	
11811-9	A88-120-17-8	47mm MCE	30ml			100ml	

PROJECT NAME: Law Assoc. / Prudential DATE OF PREP: 6/25/89
 PROJECT NUMBER: M1811
 TYPE OF SAMPLES: DUST

PREP TECH: DA
 DIRECT PREP TECHNIQUE: Dust Method

USH: ☐

RTA: ☐

LAB I.D. #:	CLIENT I.D. #:	FILTER TYPE	VOLUME FILTERED NO. 1	VOLUME FILTERED NO. 2	VOLUME FILTERED NO. 3	TOTAL SUSPENSION VOLUME	COMMENTS:
M1811-10	A88-120-17-18	47mm MCE	1ml			100ml 100ml	
M1811-11	A88-120-17-11	"	10ml			100ml	
M1811-12	A88-120.15-1	"	10ml			100ml	6-12 done on 6/24/89
—	Lab Blank	"				100ml	Box 26
M1811-13	A88-120.15-2	47mm MCE	1ml			100ml	
M1811-14	A88-120.15-3	"	5ml			100ml	
M1811-15	A88-120.15-4	"	10ml			100ml	
M1811-16	A88-120.15-5	"	25ml			100ml	
M1811-17	A88-120.15-6	"	10ml			100ml	
M1811-18	A88-120.15-7	47mm MCE	10ml			100ml	

MATERIALS ANALYTICAL SERVICES, INC.
DUST SAMPLE ANALYSIS
Dust Sampling Method: MICROVACClient: LAW ATLANTAAccelerating Voltage: 100 KVSample ID: A88-120-17-1Indicated Mag: 25 KXMAS Job Number: M 1811-1Screen Mag: 20 KXDate Sample Analyzed: 14-APR-96Microscope Number: 1 2 3 4 5Number of Openings/Grids Counted: 10 / 2Filter Type: MCE PCGrid Accepted, Low Mag: Yes NoFilter Size: 25mm, 37mm, 47mmPercent Loading: 12 %Filter Pore Size (um): 0.45Grid Box #: 1041Grid Opening: 1) 100 um x 92 um2) 100 um x 100 umAnalyst: [Signature]Reviewer: [Signature]**Calculation Data :**Counting Rules: AHERA**LEVEL II**Effective Filter Area in mm²:(A) 1339

Number of Grid Openings Examined:

(B) 10Average Grid Opening Area in mm²:(C) 0.009600

Total Volume of Original Suspension in ml:

(D) 100

Equivalent Volume of Original Suspension Filtered in ml:

(E) 10 (1:10)Area Sampled in sq. ft. / cm²:(F) 0.292 sq. ft. 271.0 cm²

Total Number of Asbestos Structures Counted:

(G) 0Number of Asbestos Structures between 0.5 and 5 microns: 0Structures \geq 5 microns: 0**FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:**

$$\frac{A}{B} \times \frac{D}{C} \times \frac{1}{E} \times G = (\text{asbestos structures per sq.ft. or cm}^2)$$

CONVERSIONS :

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures :

Structures per sq. ft.

0.00Structures per cm²0.00Results for Structures \geq 5 microns :

Structures per sq.ft.

0.00Structures per cm²0.00

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Journal Pre-proof

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C = CHRYSOTILE
AMO = AMOSITE
CRO = CROCIDOLITE
ACT = ACTINOLITE
TRE = TREMOLITE
ANT = ANTHOPHYLLITE
N = NON ASBESTOS

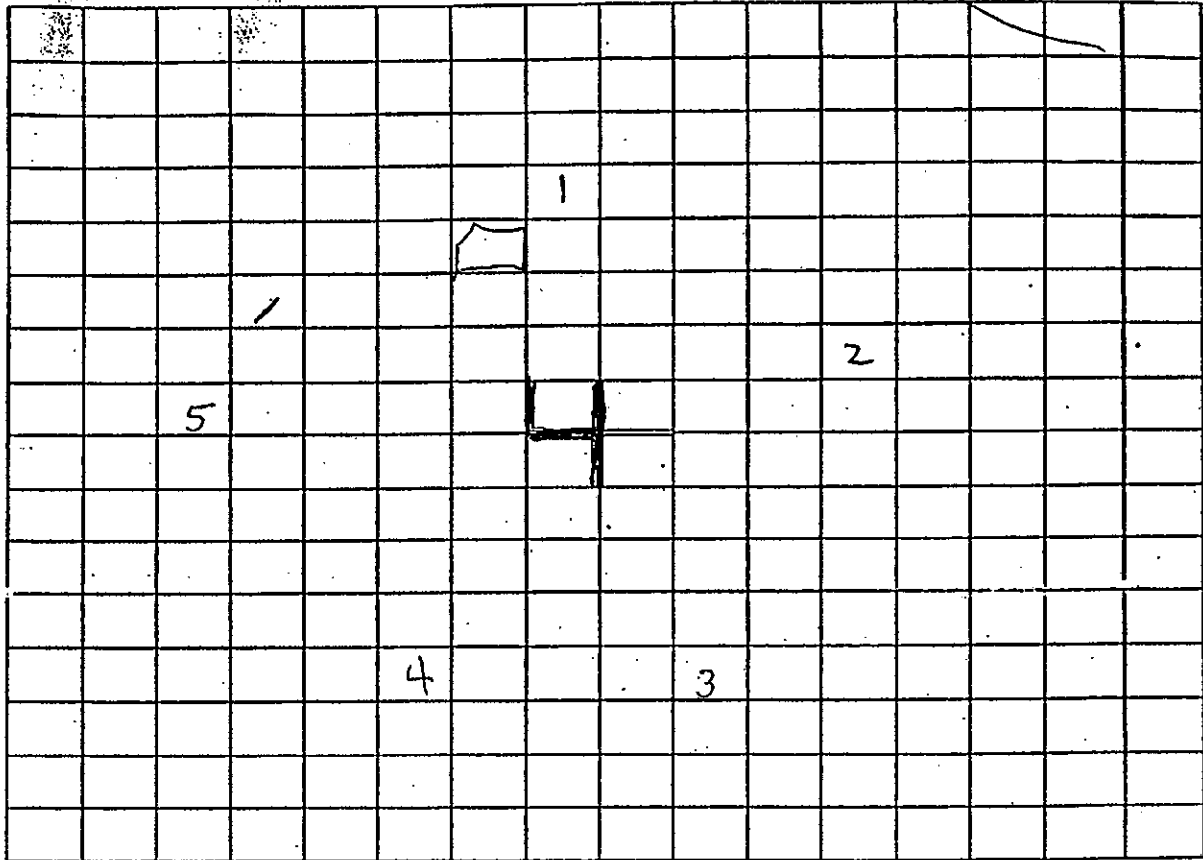
F = FIBER
B = BUNDLE
C = CLUSTER
M = MATRIX
NSD = NO STRUCTURES
DETECTED

MORPH = MORPHOLOGY
SAED = SELECTED AREA ELECTRON DIFFRACTION
EDS = ENERGY DISPERSIVE X-RAY SPECTROSCOPY
IR = INTERROW SPACING
NP = NO PATTERN
P.O. = PRINTOUT OF EDS

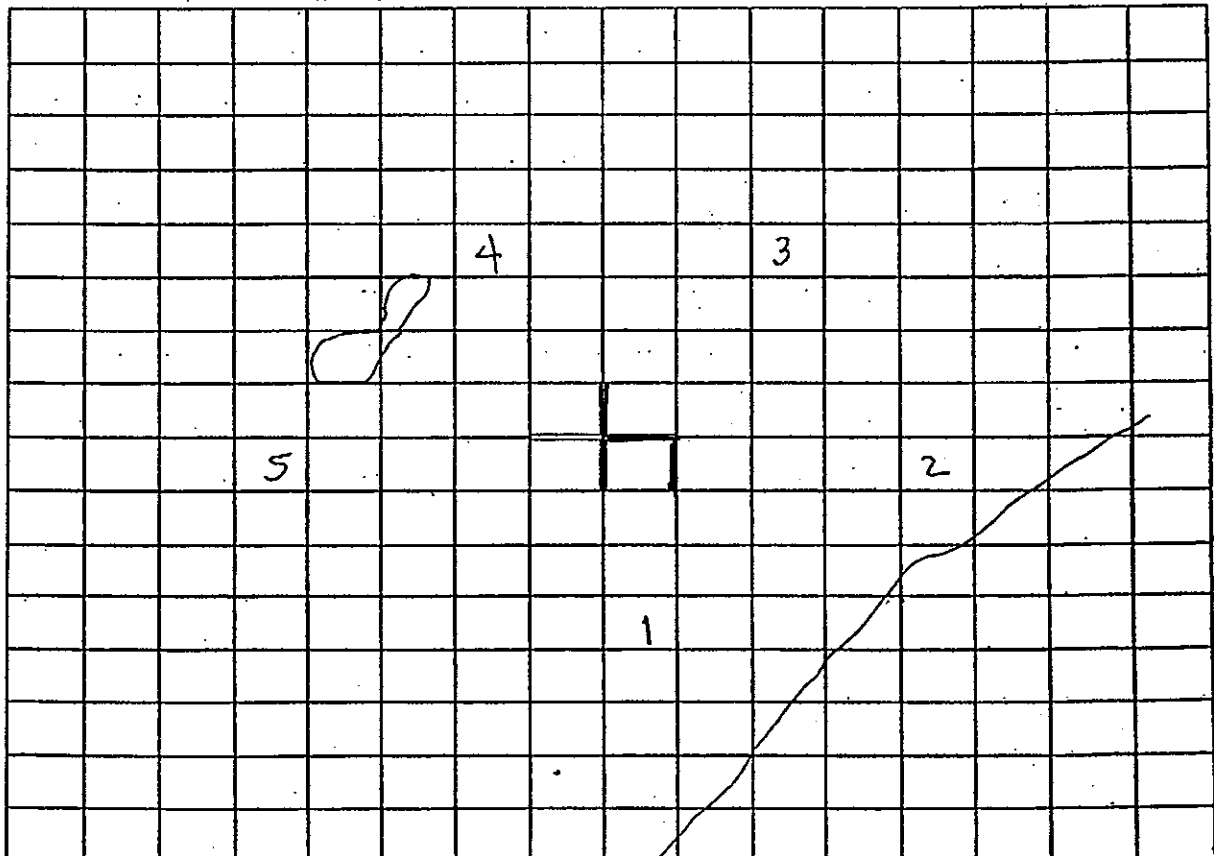
MAS Job Number: M 1811-1

Location of Grid Openings (GO) Counted in the Analysis

Grid 1:



Grid 2:



MATERIALS ANALYTICAL SERVICES, INC.
DUST SAMPLE ANALYSIS
Dust Sampling Method: MICROVAC

Client: LAW ATLANTA Accelerating Voltage: 100 KV
 Sample ID: A88-120-17-2 Indicated Mag: 25 KX
 MAS Job Number: M 1811-2 Screen Mag: 20 KX
 Date Sample Analyzed: 14-APR-96 Microscope Number: 1 2 3 4 5
 Number of Openings/Grids Counted: 10 / 2 Filter Type: MCE PC
 Grid Accepted, Low Mag: Yes No Filter Size: 25mm, 37mm, 47mm
 Percent Loading: 7 % Filter Pore Size (um): 0.45
 Grid Box #: 1041 Grid Opening: 1) 99 um x 100 um
2) 99 um x 98 um

Analyst: Reviewer: **Calculation Data:**Counting Rules: AHERA**LEVEL II**

Effective Filter Area in mm²: (A) 1339
 Number of Grid Openings Examined: (B) 10
 Average Grid Opening Area in mm²: (C) 0.009801
 Total Volume of Original Suspension in ml: (D) 100
 Equivalent Volume of Original Suspension Filtered in ml: (E) 3 (1:33 1/3)
 Area Sampled in sq. ft./cm²: (F) 0.250 sq. ft. 232.3 cm²
 Total Number of Asbestos Structures Counted: (G) 50
 Number of Asbestos Structures between 0.5 and 5 microns: 45 Structures ≥ 5 microns: 5

FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:

$$\frac{A}{B} \times \frac{D}{C} \times \frac{1}{E} \times G = (\text{asbestos structures per sq.ft. or cm}^2)$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft.
9.1108 x 10⁷Structures per cm²
9.1802 x 10⁷

Results for Structures ≥ 5 microns:

Structures per sq.ft.
9.1108 x 10⁶Structures per cm²
9.1802 x 10⁶

MAS JOB NUMBER: M 1811-2

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STR. #	GRID # SQUARE #	TYPE	STRUCTURE	LENGTH (μ m)	WIDTH (μ m)	CONFIRMATION		
						MORPH.	SAED	EDS
1	1-1	C	C	5.3	0.30	✓	✓	PRINT
2		C	MF	0.6	0.05	✓	✓	
3		C	MF	0.8	0.07	✓	✓	
4		C	MF	0.5	0.05	✓	✓	
5	1-2	C	F	3.8	0.05	✓	✓	
6		C	MF	0.5	0.03	✓	✓	
7		C	MF	2.2	0.05	✓	✓	
8		C	F	2.1	0.05	✓	✓	
9	1-3	C	B	5.7	0.10	✓	✓	
10	1-4	C	MB	4.9	0.22	✓	✓	PRINT
11		C	B	6.7	0.08	✓	✓	
12		C	MB	1.1	0.15	✓	✓	
13		C	MF	0.5	0.05	✓	✓	
14		C	MF	1.8	0.07	✓	✓	
15		C	MF	0.8	0.05	✓	✓	
16		C	F	1.3	0.05	✓	✓	
17		C	MF	1.3	0.03	✓	✓	
18	1-5	C	F	1.0	0.05	✓	✓	
19		C	F	0.9	0.05	✓	✓	
20		C	MF	0.5	0.07	✓	✓	PRINT
21		C	B	11.3	0.25	✓	✓	
22		C	MB	7.4	0.30	✓	✓	
23		C	B	1.6	0.18	✓	✓	
24		C	MF	1.4	0.08	✓	✓	
25		C	MF	0.7	0.05	✓	✓	

KEY TO ABBREVIATIONS USED ABOVE:

TYPE:

C = CHRYSOTILE
 AMO = AMOSITE
 CRO = CROCIDOLITE
 ACT = ACTINOLITE
 TRE = TREMOLITE
 ANT = ANTHOPHYLLITE
 N = NON ASBESTOS

STRUCTURE:

F = FIBER
 B = BUNDLE
 C = CLUSTER
 M = MATRIX
 NSD = NO STRUCTURES
 DETECTED

OTHERS:

MORPH = MORPHOLOGY
 SAED = SELECTED AREA ELECTRON DIFFRACTION
 EDS = ENERGY DISPERSIVE X-RAY SPECTROSCOPY
 IR = INTERROW SPACING
 NP = NO PATTERN
 P.O. = PRINTOUT OF EDS

MAS JOB NUMBER: M 1811-2

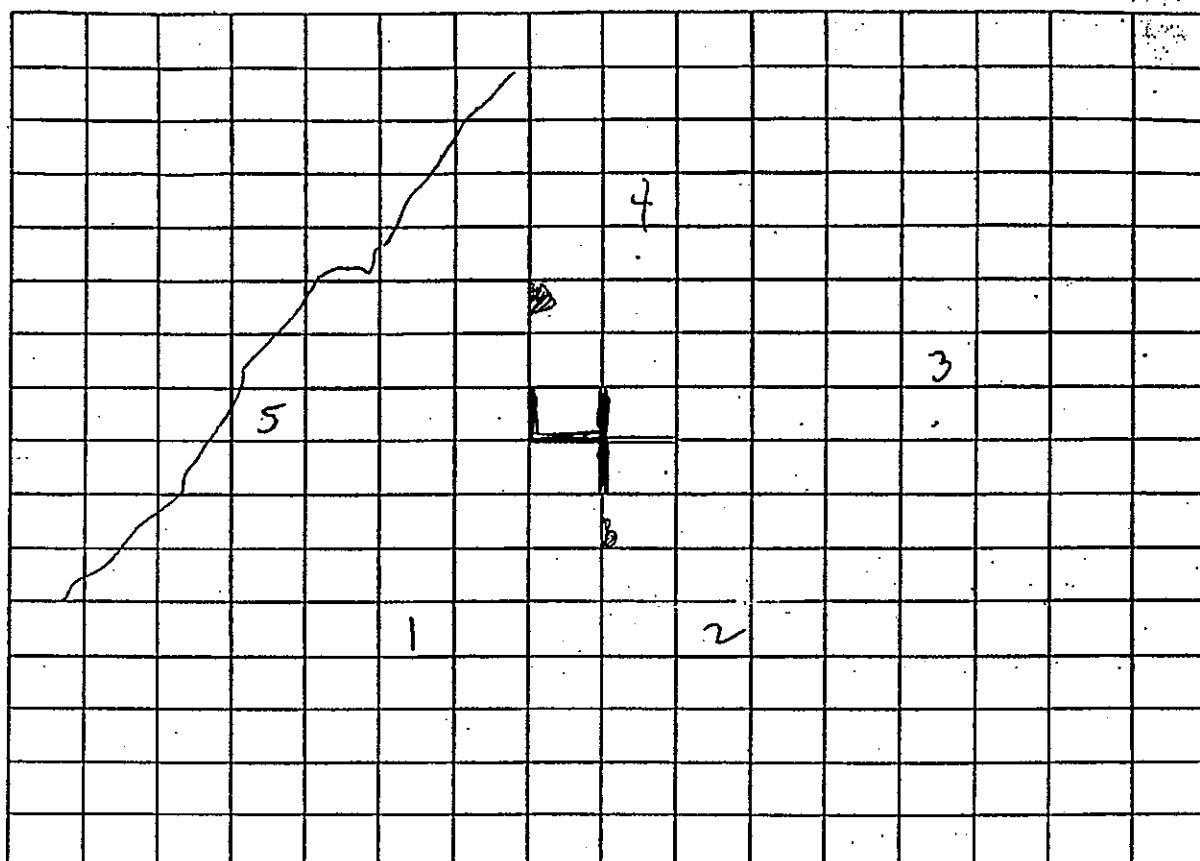
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STR. #	GRID # SQUARE #	TYPE	STRUCTURE	LENGTH (μ m)	WIDTH (μ m)	CONFIRMATION		
						MORPH.	SAED	EDS
26	1-5 (cont)	C	MF	1.4	0.05	✓	✓	
27		C	B	3.8	0.38	✓	✓	
28	2-1	C	MF	0.7	0.05	✓	✓	
29		C	C	0.6	0.05	✓	✓	
30		C	B	4.3	0.20	✓	✓	PRINT
31		C	MF	2.0	0.05	✓	✓	
32		C	F	1.6	0.05	✓	✓	
33		C	B	3.8	0.40	✓	✓	
34	2-2	C	MF	1.7	0.07	✓	✓	
35		C	MF	1.6	0.03	✓	✓	
36		C	MF	1.4	0.05	✓	✓	
37		C	MF	1.9	0.07	✓	✓	
38		C	B	1.2	0.25	✓	✓	
39	2-3	C	C	2.6	0.05	✓	✓	
40		C	MB	2.0	0.30	✓	✓	PRINT
41		C	F	1.0	0.08	✓	✓	
42		C	F	1.0	0.05	✓	✓	
43		C	B	3.2	0.18	✓	✓	
44		C	B	0.8	0.15	✓	✓	
45	2-4	C	MF	3.7	0.06	✓	✓	
46		C	MF	2.1	0.08	✓	✓	
47		C	F	2.4	0.05	✓	✓	
48		C	MF	2.6	0.03	✓	✓	
49	2-5	C	F	2.0	0.05	✓	✓	
50		C	B	4.4	0.25	✓	✓	PRINT

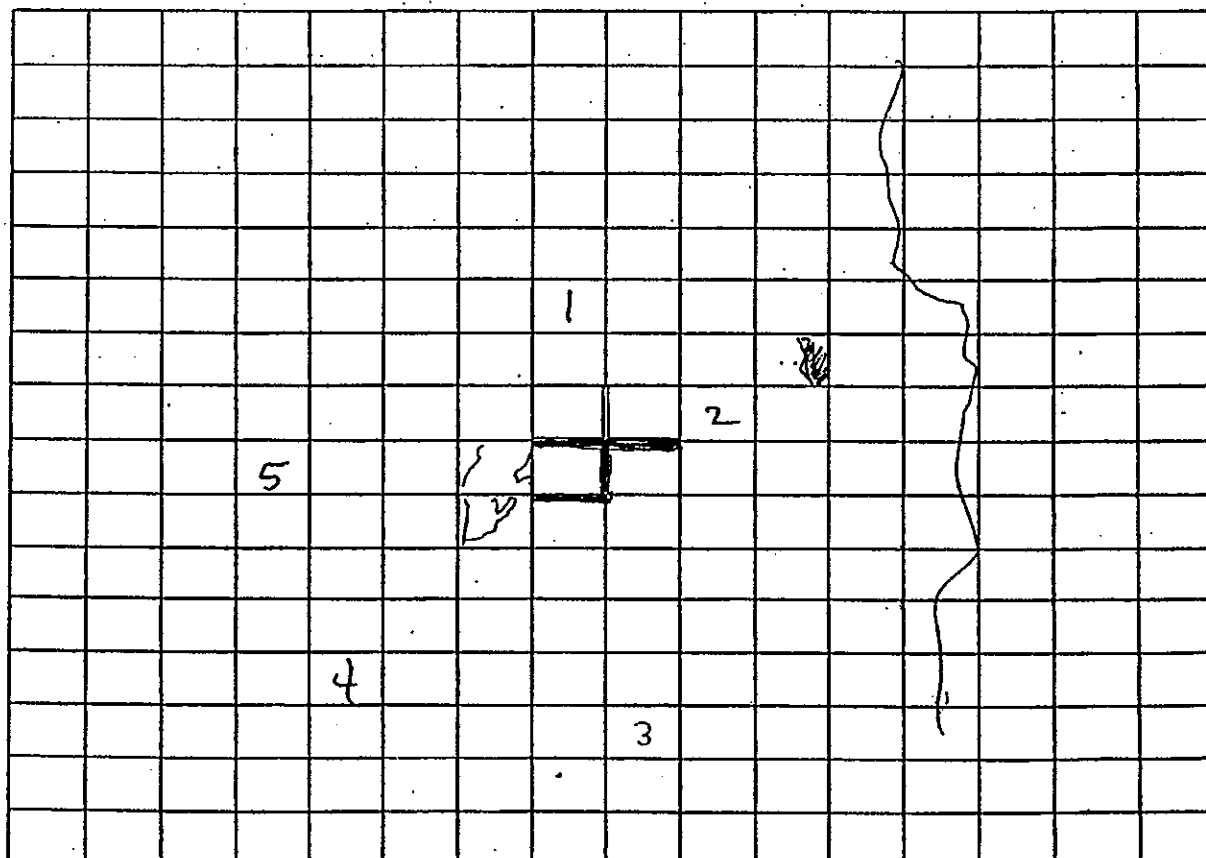
MAS Job Number: M1811-2

Location of Grid Openings, (GO) Counted in the Analysis

Grid 1:



Grid 2:



MATERIALS ANALYTICAL SERVICES, INC.
DUST SAMPLE ANALYSIS
Dust Sampling Method: MICROVACSent: LAW ATLANTAAccelerating Voltage: 100 KVSample ID: A88-120-17-3Indicated Mag: 25 KXMAS Job Number: M 1811-3Screen Mag: 20 KXDate Sample Analyzed: 14 - APR - 96Microscope Number: 1 2 3 4 5Number of Openings/Grids Counted: 10 / 2Filter Type: MCE PCGrid Accepted, Low Mag: Yes NoFilter Size: 25mm, 37mm, 47mmPercent Loading: 1 %Filter Pore Size (um): 0.45Grid Box #: 1041Grid Opening: 1) 94 um x 93 um2) 100 um x 98 umAnalyst: Reviewer: Calculation Data:Counting Rules: AHERALEVEL IIEffective Filter Area in mm²:(A) 1339

Number of Grid Openings Examined:

(B) 10Average Grid Opening Area in mm²:(C) 0.009271

Total Volume of Original Suspension in ml:

(D) 100

Equivalent Volume of Original Suspension Filtered in ml:

(E) 20 (1:5)Area Sampled in sq. ft. / cm²:(F) 0.208 sq. ft. 193.5 cm²

Total Number of Asbestos Structures Counted:

(G) 1Number of Asbestos Structures between 0.5 and 5 microns: 1Structures \geq 5 microns: 0FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:

$$\frac{A}{B} \times \frac{D}{C} \times \frac{1}{E} \times G = (\text{asbestos structures per sq.ft. or cm}^2)$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft.

3.1472 x 10⁵Structures per cm²3.1732 x 10⁵Results for Structures \geq 5 microns:

Structures per sq.ft.

0.05Structures per cm²0.05

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MORPH = MORPHOLOGY
SAED = SELECTED AREA ELECTRON DIFFRACTION
EDS = ENERGY DISPERSIVE X-RAY SPECTROSCOPY
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P.O. = PRINTOUT OF EDS

A hand-drawn diagram on a grid. A central square is drawn with thick lines. From the center of each side of this square, a line extends outwards. The lines are labeled with numbers: 1 (top), 2 (bottom), 3 (left), and 4 (right). The lines are drawn with varying thicknesses and some are slightly curved.

A hand-drawn diagram on a grid. The grid is 10 units wide and 10 units high. A path is drawn with the following points: Point 1 is at (5, 2), Point 2 is at (5, 3), Point 3 is at (3, 3), Point 4 is at (3, 4), and Point 5 is at (4, 4). A diagonal line is drawn from the bottom left corner towards the center, passing through (2, 2) and (3, 1).

MATERIALS ANALYTICAL SERVICES, INC.
DUST SAMPLE ANALYSIS
Dust Sampling Method: MICROVACClient: LAW ATLANTAAccelerating Voltage: 100 KVSample ID: A88-120-17-4Indicated Mag: 25 KXMAS Job Number: M 1811-4Screen Mag: 20 KXDate Sample Analyzed: 14 - APR - 96Microscope Number: 1 2 3 4 5Number of Openings/Grids Counted: 10 / 2Filter Type: MCE PCGrid Accepted, Low Mag: Yes NoFilter Size: 25mm, 37mm, 47mmPercent Loading: 2 %Filter Pore Size (um): 0.45Grid Box #: 1041Grid Opening: 1) 92 um x 93 um2) 100 um x 96 umAnalyst: [Signature]Reviewer: [Signature]**Calculation Data:**Counting Rules: AHERA

LEVEL II

Effective Filter Area in mm²:(A) 1339

Number of Grid Openings Examined:

(B) 10Average Grid Opening Area in mm²:(C) 0.069078

Total Volume of Original Suspension in ml:

(D) 100

Equivalent Volume of Original Suspension Filtered in ml:

(E) 30 (1:3 1/3)Area Sampled in sq. ft. / cm²:(F) 1 sq. ft. 929.0 cm²

Total Number of Asbestos Structures Counted:

(G) 0

Number of Asbestos Structures between 0.5 and 5 microns:

0Structures \geq 5 microns:0**FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:**

$$\frac{A}{B} \times \frac{D}{C} \times \frac{1}{E} \times G = (\text{asbestos structures per sq.ft. or cm}^2)$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft.

0Structures per cm²0Results for Structures \geq 5 microns:

Structures per sq.ft.

0Structures per cm²0

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KEY TO ABBREVIATIONS USED ABOVE:

STRUCTURE:

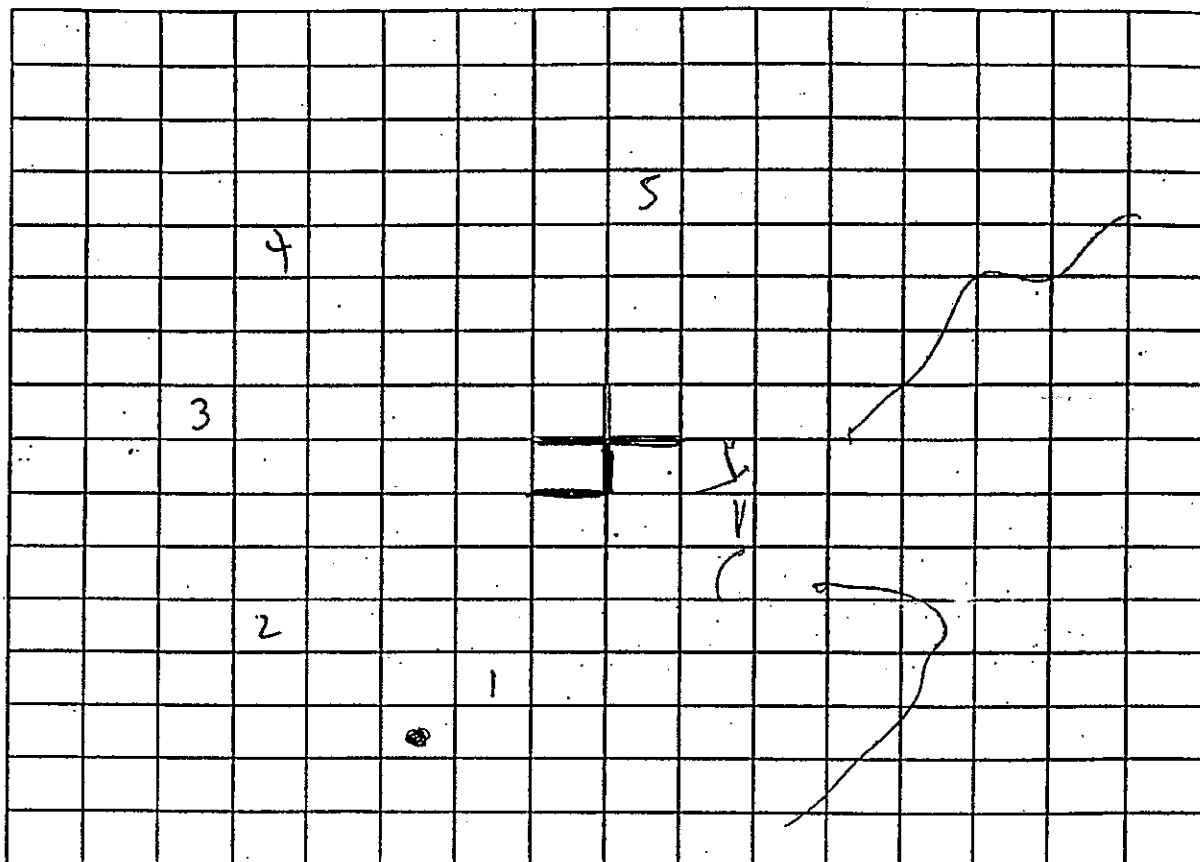
F = FIBER
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DETECTED

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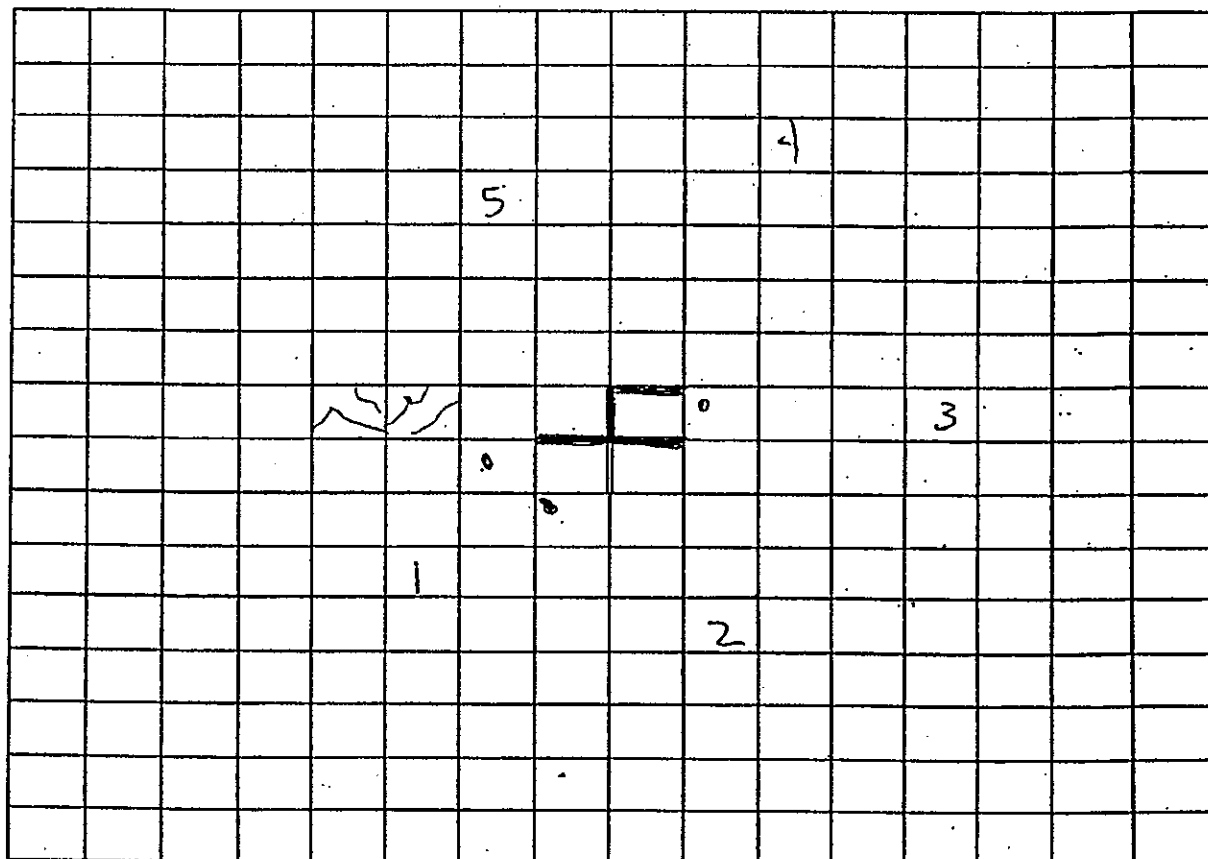
MAS Job Number: M 1811-4

Location of Grid Openings, (GO) Counted in the Analysis

Grid 1:



Grid 2:



MATERIALS ANALYTICAL SERVICES, INC.
DUST SAMPLE ANALYSIS
Dust Sampling Method: MICROVACSent: LAW ATLANTAAccelerating Voltage: 100 KVSample ID: A88-120-17-5Indicated Mag: 25 KXMAS Job Number: M 1811-5Screen Mag: 20 KXDate Sample Analyzed: 20 - APR - 96Microscope Number: 1 (2) (8) 4 5Number of Openings/Grids Counted: 9 1 2Filter Type: MCE PCGrid Accepted, Low Mag: Yes NoFilter Size: 25mm, 37mm, 47mmPercent Loading: 6 %Filter Pore Size (um): 0.45Grid Box #: 1041Grid Opening: 1) 96 um x 96 um2) 94 um x 93 umAnalyst: [Signature]Reviewer: [Signature]**Calculation Data:**Counting Rules: AHERA**LEVEL II**Effective Filter Area in mm²:(A) 1339

Number of Grid Openings Examined:

(B) 9Average Grid Opening Area in mm²:(C) 0.008979

Total Volume of Original Suspension in ml:

(D) 100

Equivalent Volume of Original Suspension Filtered in ml: (E)

1 (1:100)Area Sampled in sq. ft. / cm²:(F) 0.25 sq. ft. 232.3 cm²

Total Number of Asbestos Structures Counted:

(G) 110Number of Asbestos Structures between 0.5 and 5 microns: 92Structures \geq 5 microns: 18**FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:**

$$\frac{A}{B} \times \frac{D}{C} \times \frac{1}{E} \times G = (\text{asbestos structures per sq.ft. or cm}^2)$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft.

7.1291 x 10⁸Structures per cm²7.1846 x 10⁵Results for Structures \geq 5 microns:

Structures per sq. ft.

1.1193 x 10⁸Structures per cm²1.1284 x 10⁵

MAS JOB NUMBER: M 1811-5PAGE 1 / 4

STR. #	GRID # SQUARE #	TYPE	STRUCTURE	LENGTH (μ m)	WIDTH (μ m)	CONFIRMATION		
						MORPH.	SAED	EDS
1	1-1	C	F	2.4	0.05	✓	✓	PRINT
2		C	MF	0.5	0.05	✓	✓	
3		C	MR	1.7	0.05	✓	✓	
4		C	F	3.4	0.05	✓	✓	
5		C	MR	0.7	0.05	✓	✓	
6	1-2	C	B	30.0	0.38	✓	✓	
7		C	F	4.1	0.07	✓	✓	
8		C	F	3.9	0.07	✓	✓	
9		C	C	5.2	0.07	✓	✓	
10		C	F	2.8	0.05	✓	✓	PRINT
11		C	B	9.2	0.18	✓	✓	
12		C	F	0.9	0.05	✓	✓	
13		C	F	1.7	0.07	✓	✓	
14		C	F	0.8	0.05	✓	✓	
15		C	MR	1.1	0.05	✓	✓	
16		C	C	9.3	0.05	✓	✓	
17		C	F	1.3	0.05	✓	✓	
18		C	MR	10.8	0.20	✓	✓	
19		C	MR	1.8	0.18	✓	✓	
20		C	MF	0.5	0.05	✓	✓	PRINT
21		C	F	1.3	0.07	✓	✓	
22		C	F	2.7	0.05	✓	✓	
23	1-3	C	MF	6.6	0.05	✓	✓	
24		C	MR	2.4	0.11	✓	✓	
25		C	F	3.3	0.07	✓	✓	

KEY TO ABBREVIATIONS USED ABOVE:

TYPE:

C = CHRYSOTILE
 AMO = AMOSITE
 CRO = CROCIDOLITE
 ACT = ACTINOLITE
 TRE = TREMOLITE
 ANT = ANTHOPHYLLITE
 N = NON ASBESTOS

STRUCTURE:

F = FIBER
 B = BUNDLE
 C = CLUSTER
 M = MATRIX
 NSD = NO STRUCTURES
 DETECTED

OTHERS:

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MAS JOB NUMBER: M 1811-5PAGE 214

STR. #	GRID # SQUARE #	TYPE	STRUCTURE	LENGTH (μ m)	WIDTH (μ m)	CONFIRMATION		
						MORPH.	SAED	EDS
26	1-3(cont)	C	MF	0.7	0.05	✓	✓	
27		C	MF	0.6	0.07	✓	✓	
28		C	C	4.0	0.05	✓	✓	
29		C	F	1.0	0.05	✓	✓	
30	1-4	C	MF	1.1	0.05	✓	✓	PRINT
31		C	F	1.0	0.05	✓	✓	
32		C	F	0.5	0.05	✓	✓	
33		C	F	2.8	0.05	✓	✓	
34		C	MF	1.8	0.07	✓	✓	
35		C	MB	2.7	0.30	✓	✓	
36		C	MB	2.4	0.19	✓	✓	
37		C	B	5.2	0.22	✓	✓	
38		C	MF	0.8	0.07	✓	✓	
39		C	F	0.7	0.05	✓	✓	
40		C	C	1.3	0.08	✓	✓	PRINT
41	1-5	C	F	1.1	0.05	✓	✓	
42		C	MF	3.0	0.05	✓	✓	
43		C	MF	1.4	0.05	✓	✓	
44		C	C	5.6	0.05	✓	✓	
45		C	C	4.4	0.05	✓	✓	
46		C	F	2.6	0.05	✓	✓	
47		C	MF	1.2	0.05	✓	✓	
48		C	MF	0.6	0.03	✓	✓	
49		C	F	1.0	0.05	✓	✓	
50		C	MF	7.8	0.08	✓	✓	PRINT
51		C	F	2.4	0.08	✓	✓	
52		C	F	0.9	0.05	✓	✓	
53	2-1	C	F	1.6	0.08	✓	✓	
54		C	B	0.6	0.11	✓	✓	
55		C	F	3.8	0.08	✓	✓	

MAS JOB NUMBER: M 1811-5PAGE 3 1 4

STR. #	GRID # SQUARE #	TYPE	STRUCTURE	LENGTH (μ m)	WIDTH (μ m)	CONFIRMATION		
						MORPH.	SAED	EDS
56	2-1 (cont)	c	B ₂	2.0	0.20	✓	✓	
57		c	MF	1.5	0.05	✓	✓	
58		c	MF	5.1	0.05	✓	✓	
59		c	F	1.2	0.05	✓	✓	
60		c	e	1.9	0.08	✓	✓	PRINT
61		c	c	20.0	0.08	✓	✓	
62		c	F	1.7	0.08	✓	✓	
63		c	F	7.2	0.05	✓	✓	
64	2-2	c	F	1.0	0.07	✓	✓	
65		c	MF	0.7	0.05	✓	✓	
66		c	F	0.8	0.03	✓	✓	
67		c	F	0.6	0.05	✓	✓	
68		c	MF	1.1	0.05	✓	✓	
69		c	MF	1.2	0.05	✓	✓	
70		c	c	7.3	0.07	✓	✓	PRINT
71		c	MF	0.9	0.03	✓	✓	
72		c	MF	0.7	0.05	✓	✓	
73		c	F	1.4	0.07	✓	✓	
74		c	F	0.9	0.03	✓	✓	
75		c	F	0.8	0.05	✓	✓	
76		c	F	0.8	0.03	✓	✓	
77	2-3	c	MB	5.7	0.20	✓	✓	
78		c	MB	5.8	0.25	✓	✓	
79		c	c	2.2	0.05	✓	✓	
80		c	MF	1.1	0.08	✓	✓	PRINT
81		c	F	1.2	0.05	✓		
82		c	F	0.9	0.05	✓	✓	
83		c	MB	2.4	0.18	✓	✓	
84		c	MF	1.3	0.08	✓	✓	
85		c	MF	0.6	0.05	✓	✓	

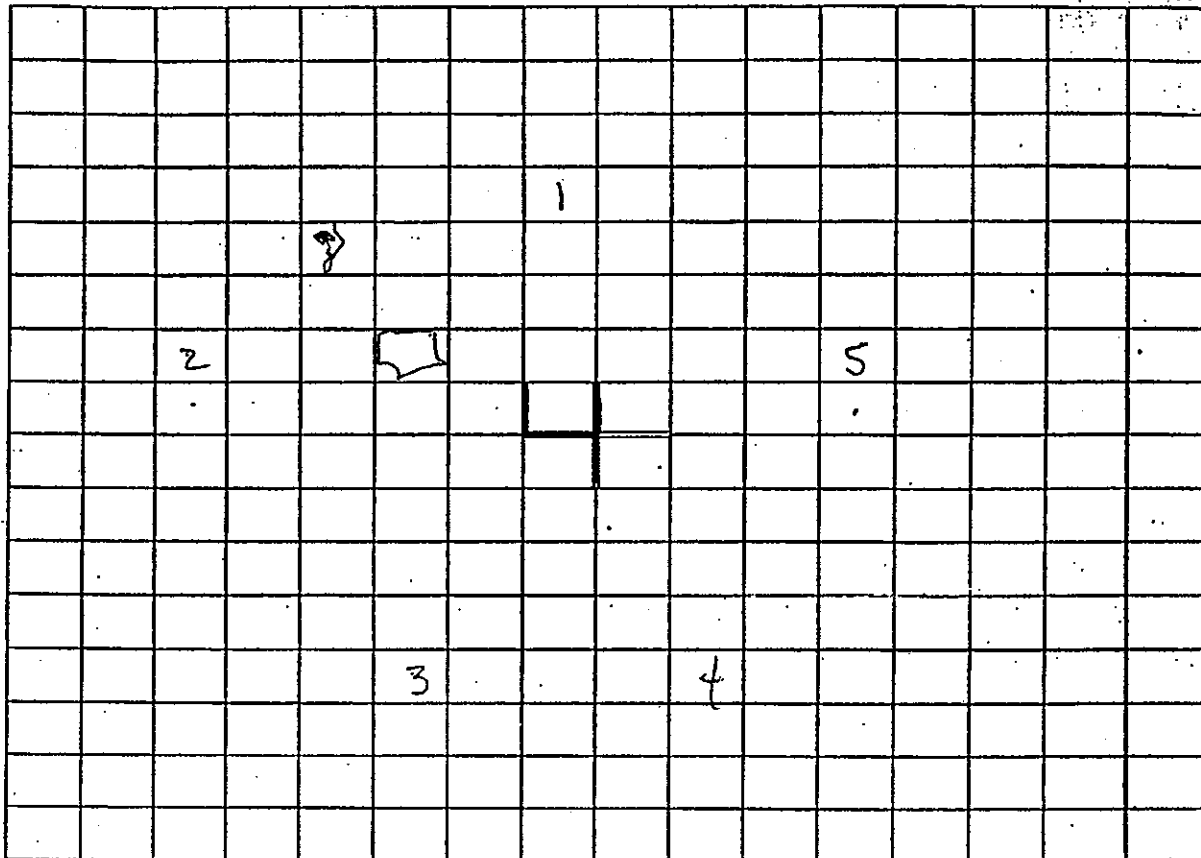
MAS JOB NUMBER: M 1811-5PAGE 4 / 4

STR. #	GRID# SQUARE #	TYPE	STRUCTURE	LENGTH (μ m)	WIDTH (μ m)	CONFIRMATION		
						MORPH.	SAED	EDS
86	2-3 (cont)	C	MF	3.2	0.05	✓	✓	
87		C	F	0.9	0.05	✓	✓	
88		C	C	16.7	0.42	✓	✓	
89		C	B	1.4	0.25	✓	✓	
90		C	F	0.8	0.08	✓	✓	PRINT
91		C	F	0.8	0.03	✓	✓	
92		C	B	9.8	0.20	✓	✓	
93		C	E	3.3	0.05	✓	✓	
94		C	F	2.0	0.05	✓	✓	
95		C	MF	2.4	0.05	✓	✓	
96		C	MF	0.5	0.03	✓	✓	
97	2-4	C	MF	0.9	0.03	✓	✓	
98		C	MF	0.6	0.05	✓	✓	
99		C	MF	0.7	0.05	✓	✓	
100		C	MF	0.7	0.08	✓	✓	PRINT
101		C	MF	1.7	0.07	✓	✓	
102		C	MB	0.7	0.18	✓	✓	
103		C	MF	1.4	0.06	✓	✓	
104		C	F	4.3	0.03	✓	✓	
105		C	MB	3.0	0.08	✓	✓	
106		C	B	6.7	0.80	✓	✓	
107		C	F	0.9	0.10	✓	✓	
108		C	F	2.0	0.03	✓	✓	
109		C	F	1.9	0.07	✓	✓	
110		C	MF	0.6	0.05	✓	✓	PRINT

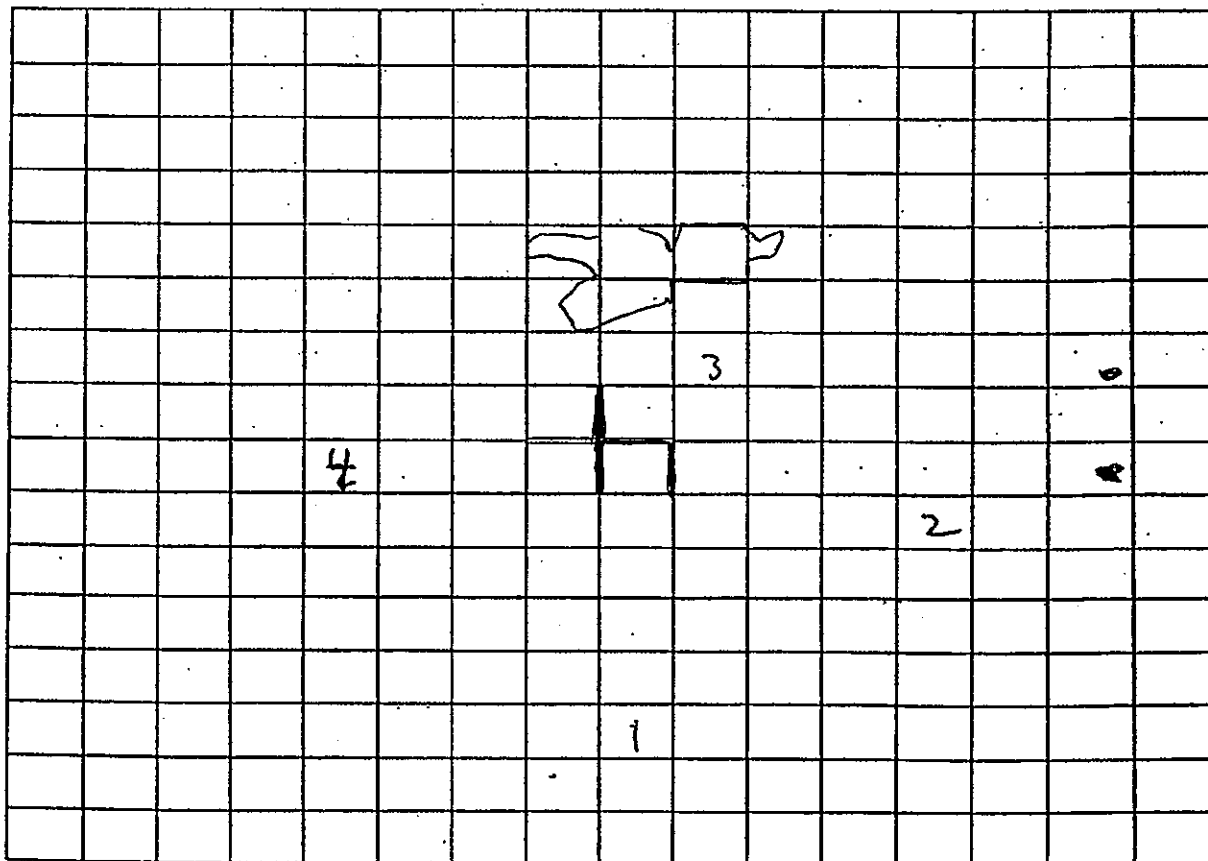
MAS Job Number: M 1811-5

Location of Grid Openings, (GO) Counted in the Analysis

Grid 1:



Grid 2:



MATERIALS ANALYTICAL SERVICES, INC.
DUST SAMPLE ANALYSIS
Dust Sampling Method: MICROVACLocation: LAW ATLANTAAccelerating Voltage: 100 KVSample ID: A88-120-17-6Indicated Mag: 25 KXMAS Job Number: M 1811-6Screen Mag: 20 KXDate Sample Analyzed: 4-23-96Microscope Number: 1 2 3 4 5Number of Openings/Grids Counted: 1012Filter Type: MCE PCGrid Accepted, Low Mag: Yes NoFilter Size: 25mm, 37mm, 47mmPercent Loading: 2 %Filter Pore Size (um): 0.45Grid Box #: 1041Grid Opening: 1) 93 um x 92 um2) 93 um x 92 umAnalyst: M. McGowanReviewer: H. Asano**Calculation Data:**Counting Rules: AHERA**LEVEL II**Effective Filter Area in mm²:(A) 1339

Number of Grid Openings Examined:

(B) 10Average Grid Opening Area in mm²:(C) 0.008556

Total Volume of Original Suspension in ml:

(D) 100

Equivalent Volume of Original Suspension Filtered in ml:

(E) 20 (1:5)Area Sampled in sq. ft. / cm²:(F) 0.166 sq. ft. 154.8 cm²

Total Number of Asbestos Structures Counted:

(G) 1Number of Asbestos Structures between 0.5 and 5 microns: 1Structures \geq 5 microns: 0**FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:**

$$\frac{A}{B} * \frac{D}{C} * \frac{1}{E} * G = (\text{asbestos structures per sq.ft. or cm}^2)$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft.

4.714 x 10⁵Structures per cm²5.055 x 10²Results for Structures \geq 5 microns:

Structures per sq.ft.

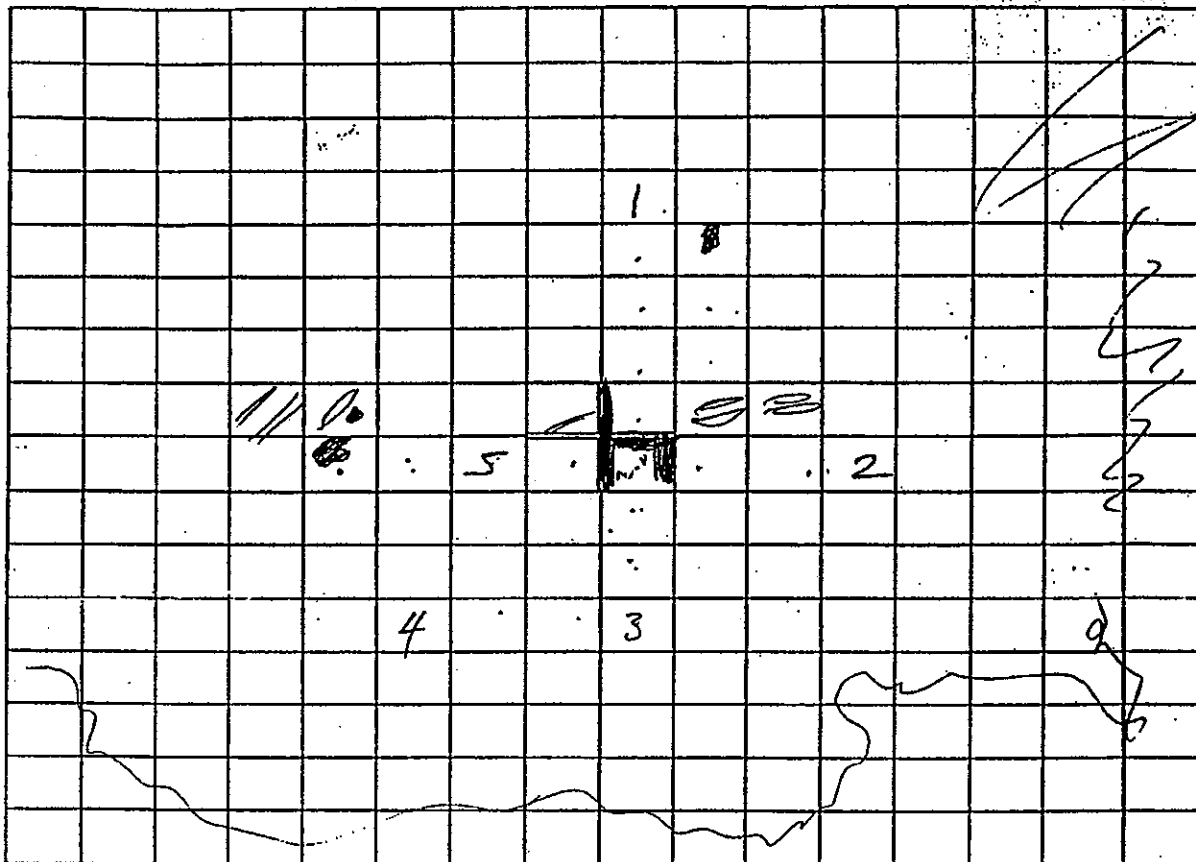
BAStructures per cm²BA

MORPH = MORPHOLOGY
SAED = SELECTED AREA ELECTRON DIFFRACTION
EDS = ENERGY DISPERSIVE X-RAY SPECTROSCOPY
IR = INTERROW SPACING
NP = NO PATTERN
P.O. = PRINTOUT OF EDS

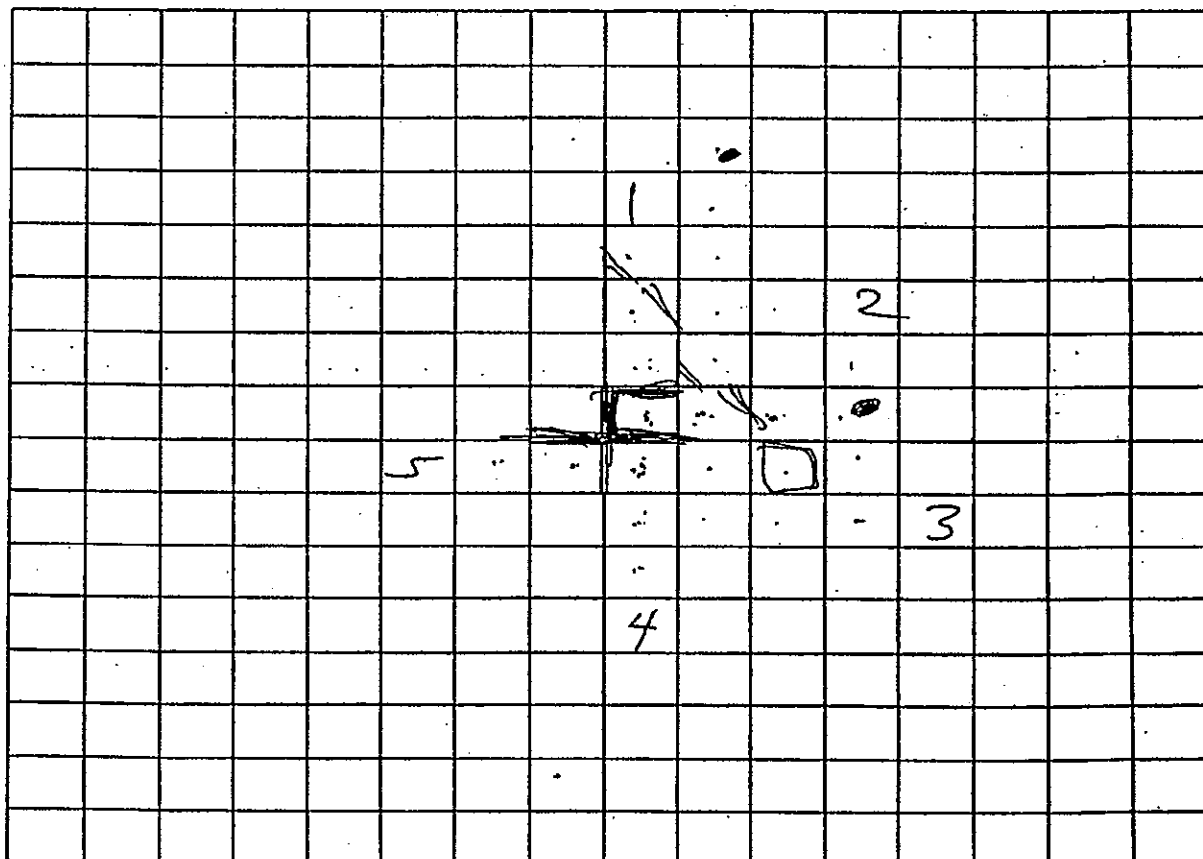
MAS Job Number: M 1811-6

Location of Grid Openings, (GO) Counted in the Analysis

Grid 1:



Grid 2:



MATERIALS ANALYTICAL SERVICES, INC.
DUST SAMPLE ANALYSIS
Dust Sampling Method: MICROVACClient: LAW ATLANTASample ID: A88-120-17-7MAS Job Number: M 1811-7Date Sample Analyzed: 4-23-96Number of Openings/Grids Counted: 1012Grid Accepted, Low Mag: Yes NoPercent Loading: 5 %Grid Box #: 1041Analyst: H. H. H.Reviewer: P. P. P.Accelerating Voltage: 100 KVIndicated Mag: 25 KXScreen Mag: 20 KXMicroscope Number: 1 12 3 4 5Filter Type: MCE PCFilter Size: 25mm, 37mm, 47mmFilter Pore Size (um): 0.145Grid Opening: 1) 93 um x 95 um2) 92 um x 94 um**Calculation Data:**Counting Rules: **AHERA****LEVEL II**Effective Filter Area in mm²: (A) 1339Number of Grid Openings Examined: (B) 10Average Grid Opening Area in mm²: (C) 0.1008742Total Volume of Original Suspension in ml: (D) 100Equivalent Volume of Original Suspension Filtered in ml: (E) 20 (1:5)Area Sampled in sq. ft. / cm²: (F) 1 sq. ft. 929 cm²Total Number of Asbestos Structures Counted: (G) 20Number of Asbestos Structures between 0.5 and 5 microns: 13 Structures \geq 5 microns: 7**FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:**

$$\frac{A}{B} \times \frac{D}{C} \times \frac{1}{E} \times G = \text{(asbestos structures per sq.ft. or cm}^2\text{)}$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft.

1.532 x 10⁶Structures per cm²1.699 x 10³Results for Structures \geq 5 microns:

Structures per sq.ft.

5.361 x 10⁵Structures per cm²5.771 x 10²

MAS JOB NUMBER: M 1811-7PAGE 111

STR. #	GRID # SQUARE #	TYPE	STRUCTURE	LENGTH (μ m)	WIDTH (μ m)	CONFIRMATION		
						MORPH.	SAED	EDS
1	1-1	C	F	2.5	0.105	/	/	PD
2		C	F	3.0	0.105	/	/	
	1-2		NSD					
3	1-3	C	F	5.10	0.105	/	/	
4	1-4	C	C-F	4.15	0.105	/	/	
5	1-5	C	M-B	4.10	0.12	/	/	
6		C	F	2.15	0.105	/	/	
7		C	C-F	2.10	0.105	/	/	
	2-1		NSD					
8	2-2	C	B	3.10	0.12	/	/	
9		C	B	4.10	0.14	/	/	
10	2-3	C	M-F	5.10	0.105	/	/	PD
11		C	B	2.15	0.12	/	/	
12		C	M-F	2.10	0.105	/	/	
13	2-4	C	M-B	6.10	0.13	/	/	
14		C	B	10.10	0.12	/	/	
15		C	F	1.15	0.105	/	/	
16		C	F	1.10	0.105	/	/	
17		C	F	12.10	0.105	/	/	
18	2-5	C	M-F	2.15	0.105	/	/	
19		C	C-F	3.10	0.105	/	/	
20		C	F	12.10	0.105	/	/	PD

KEY TO ABBREVIATIONS USED ABOVE:

TYPE:
 C = CHRYSOTILE
 AMO = AMOSITE
 CRO = CROCIDOLITE
 ACT = ACTINOLITE
 TRE = TREMOLITE
 ANT = ANTHOPHYLLITE
 N = NON ASBESTOS

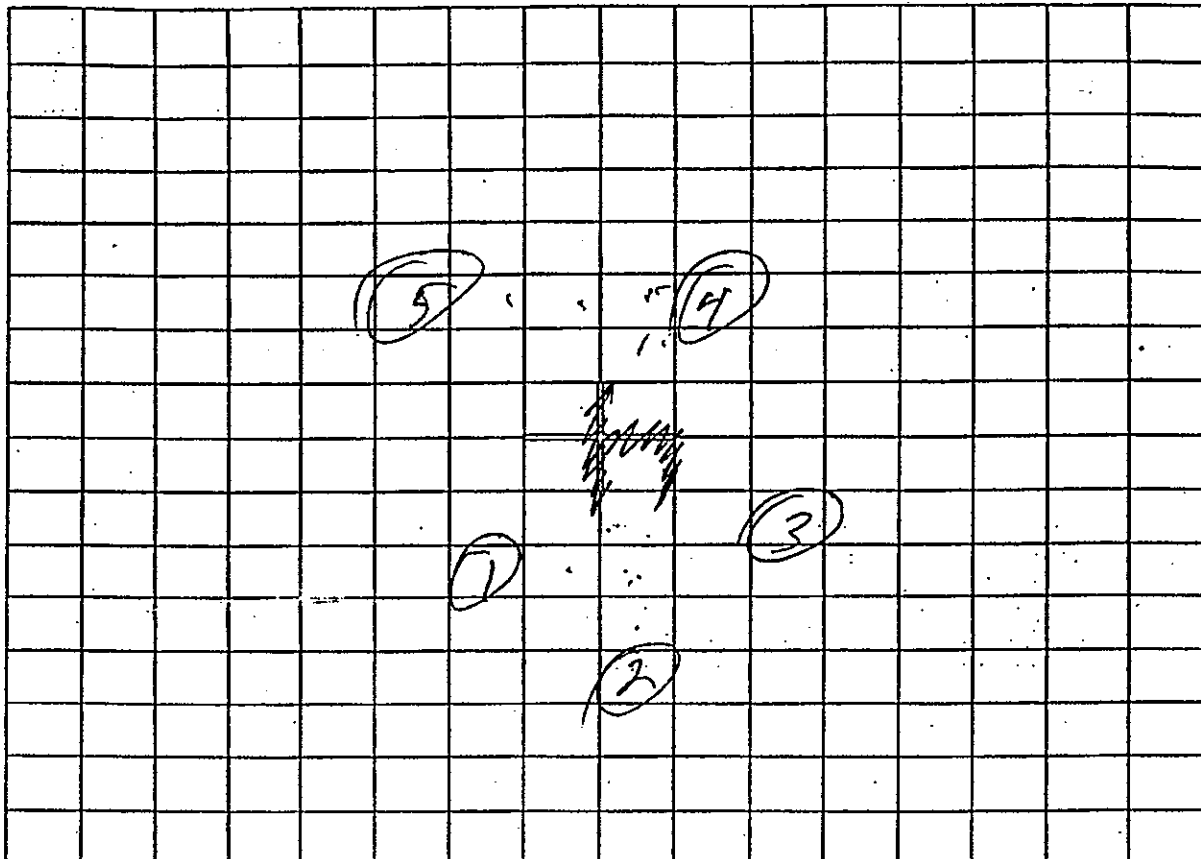
STRUCTURE:
 F = FIBER
 B = BUNDLE
 C = CLUSTER
 M = MATRIX
 NSD = NO STRUCTURES
 DETECTED

OTHERS:
 MORPH = MORPHOLOGY
 SAED = SELECTED AREA ELECTRON DIFFRACTION
 EDS = ENERGY DISPERSIVE X-RAY SPECTROSCOPY
 IR = INTERROW SPACING
 NP = NO PATTERN
 P.O. = PRINTOUT OF EDS

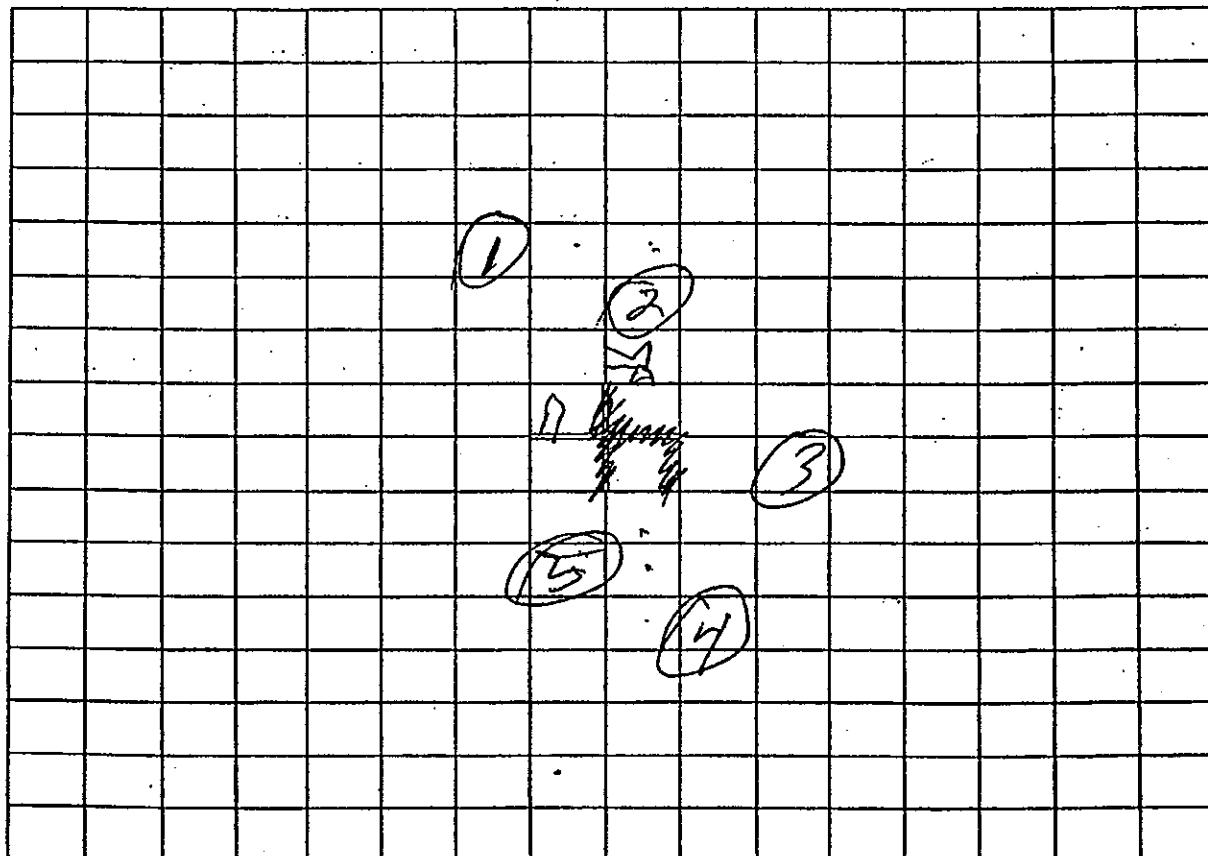
MAS Job Number: M 1811-7

Location of Grid Openings, (GO) Counted in the Analysis

Grid 1:



Grid 2:



MATERIALS ANALYTICAL SERVICES, INC.
DUST SAMPLE ANALYSIS

Dust Sampling Method: MICROVAC

Client: LAW ATLANTA

Accelerating Voltage: 100 kV

Sample ID: A88-120-17-8

Indicated Mag: 25 KX

MAS Job Number: M 1811-8

Screen Mag: 20 KX

Date Sample Analyzed: 4-23-96

Microscope Number: 1 2 3 4 5

Number of Openings/Grids Counted: 512

Filter Type: MCE PC

Grid Accepted, Low Mag: Yes No

Filter Size: 25mm, 37mm, 47mm

Percent Loading: 20 %

Filter Pore Size (um): 0.45

Grid Box #: 1041

Grid Opening: 1) 99 um x 96 um
2) 90 um x 91 um

Analyst: [Signature]
Reviewer: [Signature]
Calculation Data:

Counting Rules: AHERA
LEVEL II

Effective Filter Area in mm²: (A) 1339

Number of Grid Openings Examined: (B) 5

Average Grid Opening Area in mm²: (C) 0.008847

Total Volume of Original Suspension in ml: (D) 100

Equivalent Volume of Original Suspension Filtered in ml: (E) 1.0 (1:100)

Area Sampled in sq. ft. / cm²: (F) 1.222 sq. ft. 1135.5 cm²

Total Number of Asbestos Structures Counted: (G) 98

Number of Asbestos Structures between 0.5 and 5 microns: 75 Structures ≥ 5 microns: 23
FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:

$$\frac{A}{B} \times \frac{C}{D} \times \frac{E}{F} \times G = (\text{asbestos structures per sq.ft. or cm}^2)$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft.

2.428 x 10⁸

Structures per cm²
2.612 x 10⁵

Results for Structures ≥ 5 microns:

Structures per sq. ft.

5.697 x 10⁷

Structures per cm²
6.131 x 10⁴

MAS JOB NUMBER: M 1811-8PAGE 114

STR. #	GRID # SQUARE #	TYPE	STRUCTURE	LENGTH (μ m)	WIDTH (μ m)	CONFIRMATION		
						MORPH.	SAED	EDS
1	1-1	C	F	1.0	0.1	—	—	P
2		C	F	0.9	0.1	—	—	
3		C	M-B	8.0	0.2	—	—	
4		C	M-F	5.4	0.1	—	—	
5		C	F	1.3	0.1	—	—	
6		C	M-F	6.0	0.1	—	—	
7		C	M-F	1.4	0.1	—	—	
8		C	F	1.0	0.1	—	—	
9		C	F	0.9	0.1	—	—	
10		C	M-F	5.8	0.1	—	—	P
11		C	M-B	4.4	0.2	—	—	
12		C	M-F	2.0	0.05	—	—	
13		C	M-F	1.7	0.1	—	—	
14		C	M-F	1.7	0.1	—	—	
15		C	M-B	3.7	0.2	—	—	
16		C	B	3.5	0.2	—	—	
17		C	B	2.1	0.2	—	—	
18		C	B	1.7	0.1	—	—	
19		C	F	0.6	0.1	—	—	
20		C	B	2.4	0.2	—	—	P
21		C	B	5.0	0.2	—	—	
22		C	F	2.0	0.15	—	—	
23		C	F	2.3	0.1	—	—	
24		C	B	1.3	0.2	—	—	
25	1-2	C	B	5.7	0.2	—	—	

KEY TO ABBREVIATIONS USED ABOVE:

TYPE:

C = CHRYSOTILE
 AMO = AMOSITE
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 DETECTED

OTHERS:

MORPH = MORPHOLOGY
 SAED = SELECTED AREA ELECTRON DIFFRACTION
 EDS = ENERGY DISPERSIVE X-RAY SPECTROSCOPY
 IR = INTERROW SPACING
 NP = NO PATTERN
 P.O. = PRINTOUT OF EDS

MAS JOB NUMBER: M 1811-8PAGE 212

STR. #	GRID # SQUARE #	TYPE	STRUCTURE	LENGTH (μ m)	WIDTH (μ m)	CONFIRMATION		
						MORPH.	SAED	EDS
26	1-2 center	C	M-B	2.0	0.2	—	—	
27		C	F	1.0	0.1	—	—	
28		C	F	3.0	0.1	—	—	
29		C	F	1.7	0.1	—	—	
30		C	F	0.9	0.05	—	—	P-6
31		C	B	2.9	0.2	—	—	
32		C	M-F	1.8	0.1	—	—	
33		C	M-F	1.7	0.1	—	—	
34		C	M-B	1.0	0.2	—	—	
35		C	F	1.0	0.1	—	—	
36		C	B	1.8	0.1	—	—	
37		C	M-B	6.0	0.2	—	—	
38	1-3	C	B	2.0	0.2	—	—	
39		C	M-B	1.4	0.2	—	—	
40		C	M-B	2.9	0.2	—	—	P-6
41		C	B	2.4	0.2	—	—	
42		C	M-F	2.0	0.2	—	—	
43		C	B	4.6	0.2	—	—	
44		C	F	4.4	0.1	—	—	
45		C	F	1.0	0.1	—	—	
46		C	B	15.0	0.6	—	—	
47		C	F	2.0	0.1	—	—	
48		C	F	1.1	0.1	—	—	
49		C	F	1.2	0.1	—	—	
50		C	B	20.0	0.5	—	—	P-6
51		C	M-B	6.6	0.15	—	—	
52		C	M-F	2.0	0.1	—	—	
53		C	M-B	24.3	0.6	—	—	
54		C	F	3.3	0.1	—	—	
55		C	F	1.2	0.1	—	—	

MAS JOB NUMBER: M 1811-8

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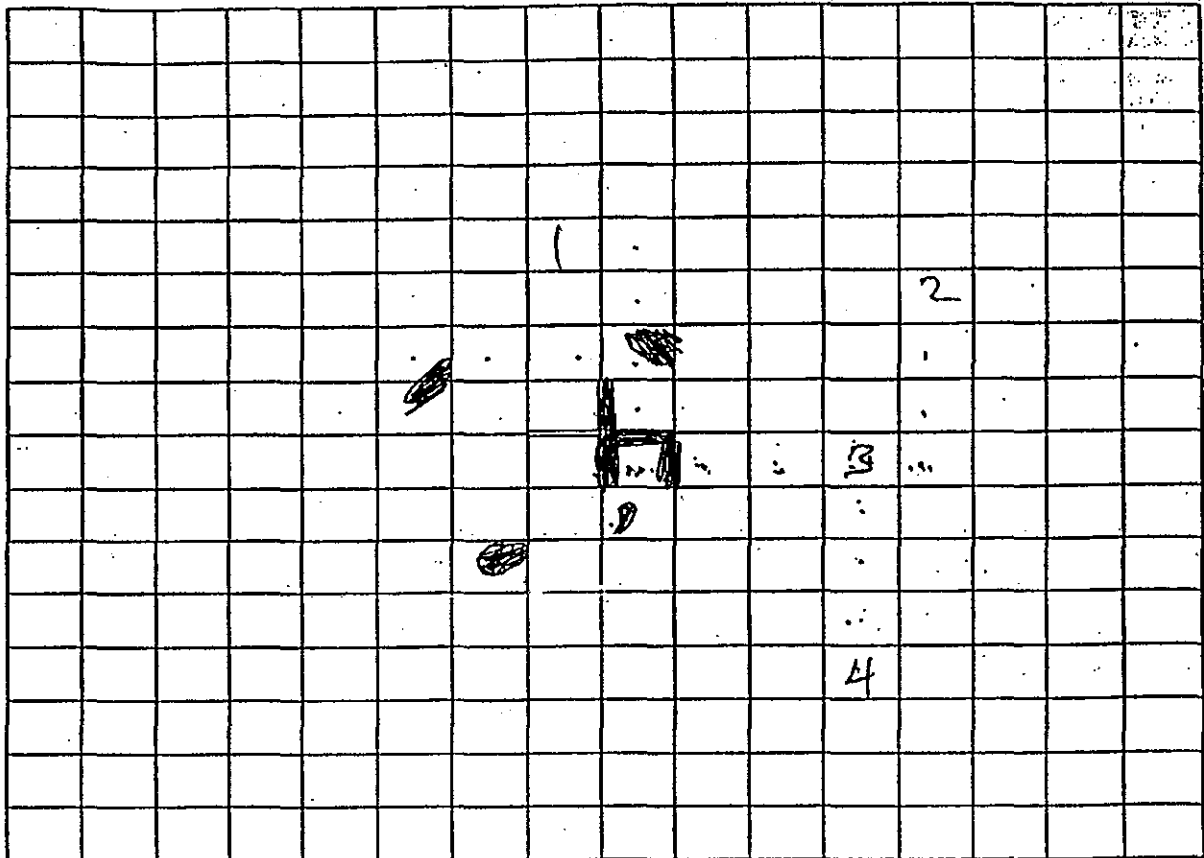
STR. #	GRID # SQUARE #	TYPE	STRUCTURE	LENGTH (μ m)	WIDTH (μ m)	CONFIRMATION		
						MORPH.	SAED	EDS
56	1-3	C	F	1.0	0.1	—	—	
57	1-4	C	B	13.4	0.9	—	—	
58		C	B	2.3	0.2	—	—	
59		C	F	0.9	0.1	—	—	
60		C	F	6.0	0.1	—	—	P ₁₀
61		C	F	3.0	0.1	—	—	
62		C	F	9.2	0.1	—	—	
63		C	M-F	0.9	0.1	—	—	
64		C	F	1.9	0.1	—	—	
65		C	B	3.0	0.2	—	—	
66		C	F	2.5	0.1	—	—	
67		C	M-F	1.8	0.1	—	—	
68		C	B	19.0	0.3	—	—	
69		C	F	1.9	0.1	—	—	
70		C	B	4.2	0.2	—	—	P ₁₀
71		C	M-F	3.7	0.2	—	—	
72		C	F	1.9	0.1	—	—	
73		C	F	15.0	0.1	—	—	
74	2-1	C	M-F	1.0	0.1	—	—	
75		C	F	9.7	0.2	—	—	
76		C	F	8.0	0.1	—	—	
77		C	F	4.4	0.1	—	—	
78		C	F	1.8	0.1	—	—	
79		C	M-F	1.3	0.1	—	—	
80		C	M-F	3.7	0.1	—	—	P ₁₀
81		C	M-B	6.0	0.1	—	—	
82		C	F	4.3	0.05	—	—	
83		C	M-F	1.0	0.1	—	—	
84		C	F	6.2	0.1	—	—	
85		C	B	3.6	0.2	—	—	

PAGE

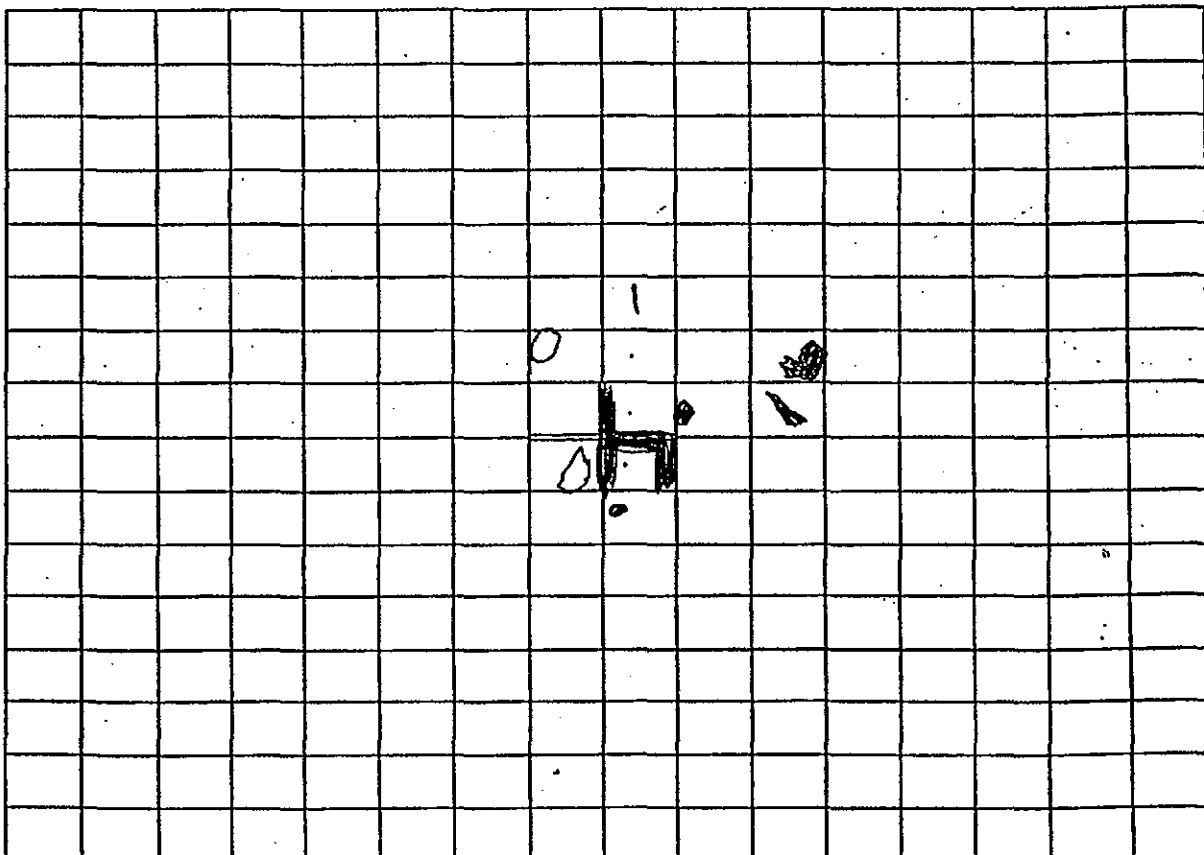
[illegible]

MAS Job Number: M 1811-8
 Location of Grid Openings, (GO) Counted in the Analysis

Grid 1:



Grid 2:



MATERIALS ANALYTICAL SERVICES, INC.
DUST SAMPLE ANALYSIS
Dust Sampling Method: MICROVACSent: LAW ATLANTAAccelerating Voltage: 100 KVSample ID: A88-120-17-9Indicated Mag: 25 KXMAS Job Number: M 1811-9Screen Mag: 20 KXDate Sample Analyzed: 4-23-96Microscope Number: 1 12 3 4 5Number of Openings/Grids Counted: 10 1 2Filter Type: MCE PCGrid Accepted, Low Mag: Yes NoFilter Size: 25mm, 37mm, 47mmPercent Loading: 2 %Filter Pore Size (um): 0.45Grid Box #: 1041Grid Opening: 1) 93 um x 94 um2) 92 um x 95 umAnalyst: [Signature]
Reviewer: [Signature]**Calculation Data:**Counting Rules: AHERALEVEL IIEffective Filter Area in mm²: (A) 1339Number of Grid Openings Examined: (B) 10Average Grid Opening Area in mm²: (C) 0.008741Total Volume of Original Suspension in ml: (D) 100Equivalent Volume of Original Suspension Filtered in ml: (E) 30 (1: 3.3)Area Sampled in sq. ft. / cm²: (F) 1 sq. ft. 929 cm²Total Number of Asbestos Structures Counted: (G) 2Number of Asbestos Structures between 0.5 and 5 microns: 1 Structures \geq 5 microns: 1**FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:**

$$\frac{A}{B} * \frac{D}{C} * \frac{1}{E} * G = (\text{asbestos structures per sq.ft. or cm}^2)$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft.

1.021 x 10⁵Structures per cm²1.088 x 10³Results for Structures \geq 5 microns:

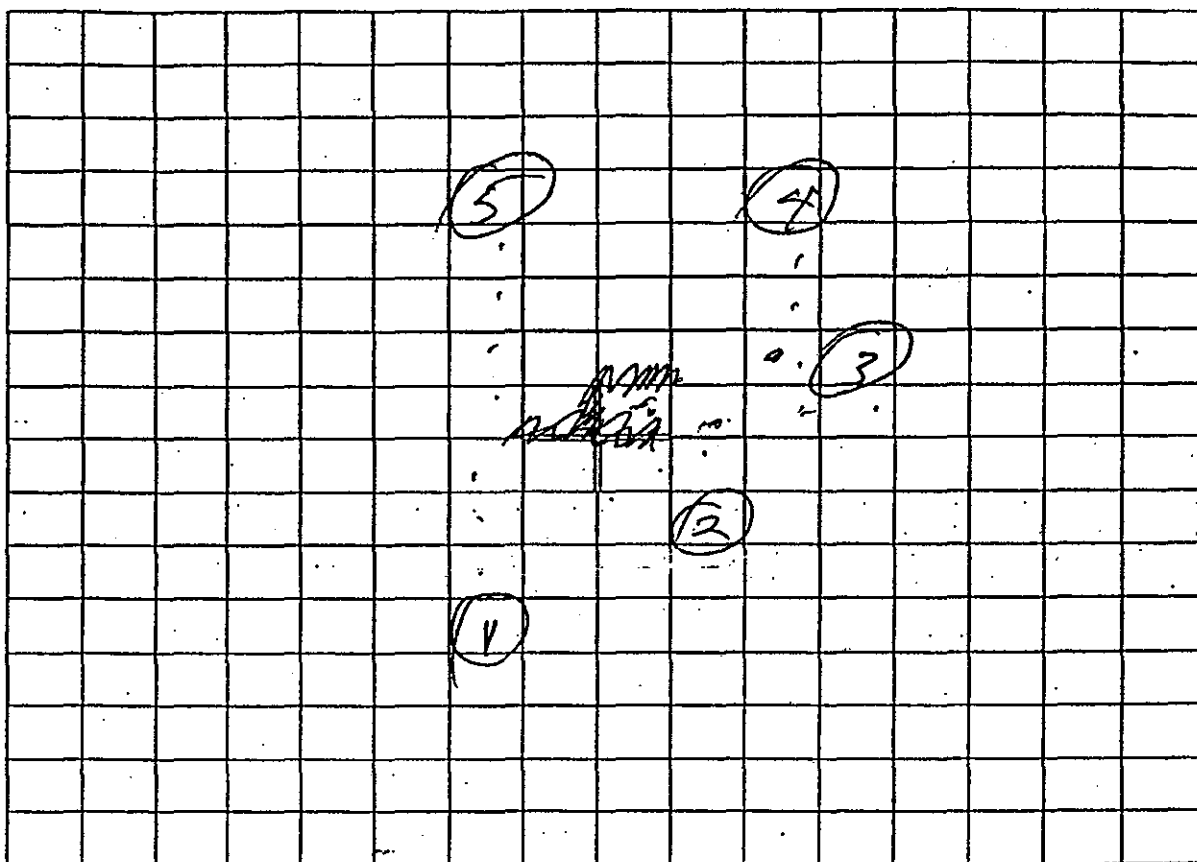
Structures per sq.ft.

5.106 x 10⁴Structures per cm²5.198 x 10¹

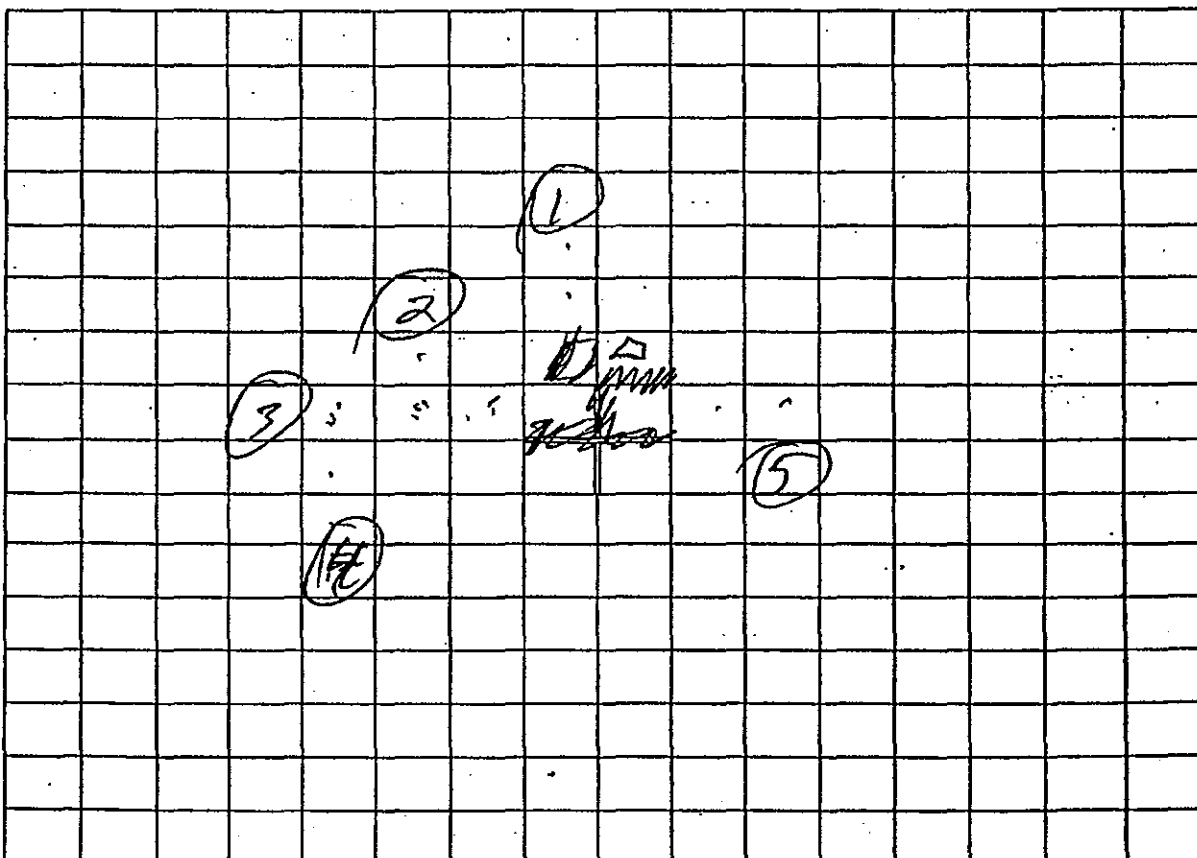
MORPH = MORPHOLOGY
SAED = SELECTED AREA ELECTRON DIFFRACTION
EDS = ENERGY DISPERSIVE X-RAY SPECTROSCOPY
IR = INTERROW SPACING
NP = NO PATTERN
P.Q. = PRINTOUT OF EDS

MAS Job Number: M 1811-9
 Location of Grid Openings, (GO) Counted in the Analysis

Grid 1:



Grid 2:



MATERIALS ANALYTICAL SERVICES, INC.
DUST SAMPLE ANALYSIS
Dust Sampling Method: MCROVACClient: LAW ATLANTASample ID: A88-120-17-10MAS Job Number: M 1811-10Date Sample Analyzed: 4-24-96Number of Openings/Grids Counted: 1012Grid Accepted, Low Mag: ☒ Yes ☐ NoPercent Loading: 8 %Grid Box #: 1042
 Analyst: [Signature]
 Reviewer: [Signature]
Accelerating Voltage: 100 KVIndicated Mag: 25 KXScreen Mag: 20 KXMicroscope Number: 1 12 3 4 5Filter Type: MCE PCFilter Size: 25mm, 37mm, 47mmFilter Pore Size (um): 0.45Grid Opening: 1) 92 um x 94 um2) 95 um x 98 um**Calculation Data:**Counting Rules: AHERA**LEVEL II**Effective Filter Area in mm²: (A) 1339Number of Grid Openings Examined: (B) 10Average Grid Opening Area in mm²: (C) 0.1008979Total Volume of Original Suspension in ml: (D) 100Equivalent Volume of Original Suspension Filtered in ml: (E) 10 (1:100)Area Sampled in sq. ft. / cm²: (F) 0.14 sq. ft. 41219 cm²Total Number of Asbestos Structures Counted: (G) 59Number of Asbestos Structures between 0.5 and 5 microns: 35 Structures \geq 5 microns: 24**FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:**

$$\frac{A}{B} \times \frac{D}{C} \times \frac{1}{E} \times G = (\text{asbestos structures per sq.ft. or cm}^2)$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft.

 2.2×10^8 Structures per cm² 2.131×10^5 Results for Structures \geq 5 microns:

Structures per sq.ft.

 8.948×10^7 Structures per cm² 8.668×10^4

MAS JOB NUMBER: M 1811-10PAGE 113

STR. #	GRID # SQUARE #	TYPE	STRUCTURE	LENGTH (μ m)	WIDTH (μ m)	CONFIRMATION		
						MORPH.	SAED	EDS
1	1-1	C	f	2.15	0.105	/	/	PD
2		C	M-f	1.10	0.105	/	/	
3		C	M-f	6.10	0.105	/	/	
4		C	f	4.10	0.105	/	/	
5		C	M-f	5.10	0.105	/	/	
6		C	f	1.15	0.105	/	/	
7		C	f	2.10	0.105	/	/	
8		C	f	2.10	0.105	/	/	
9	-2	C	M-f	3.10	0.105	/	/	
10		C	f	2.15	0.105	/	/	PD
11		C	B	4.10	0.12	/	/	
12		C	f	5.10	0.105	/	/	
13		C	M-f	1.10	0.105	/	/	
14		C	f	1.15	0.105	/	/	
15	-3	C	M-f	15.10	0.105	/	/	
16		C	M-f	1.10	0.105	/	/	
17		C	f	4.15	0.105	/	/	
18		C	C-f	1.10	0.105	/	/	
19		C	B	6.10	0.12	/	/	
20	-4	C	M-f	4.10	0.105	/	/	PD
21		C	M-f	6.10	0.105	/	/	
22		C	f	4.10	0.105	/	/	
23		C	f	2.15	0.105	/	/	
24		C	M-f	2.15	0.105	/	/	
25	-5	C	f	5.10	0.105	/	/	

KEY TO ABBREVIATIONS USED ABOVE:

TYPE:

C = CHRYSOTILE
 AMO = AMOSITE
 CRO = CROCIDOLITE
 ACT = ACTINOLITE
 TRE = TREMOLITE
 ANT = ANTHOPHYLLITE
 N = NON ASBESTOS

STRUCTURE:

F = FIBER
 B = BUNDLE
 C = CLUSTER
 M = MATRIX
 NSD = NO STRUCTURES
 DETECTED

OTHERS:

MORPH = MORPHOLOGY
 SAED = SELECTED AREA ELECTRON DIFFRACTION
 EDS = ENERGY DISPERSIVE X-RAY SPECTROSCOPY
 IR = INTERROW SPACING
 NP = NO PATTERN
 P.O. = PRINTOUT OF EDS

MAS JOB NUMBER: M 1811-10PAGE 215

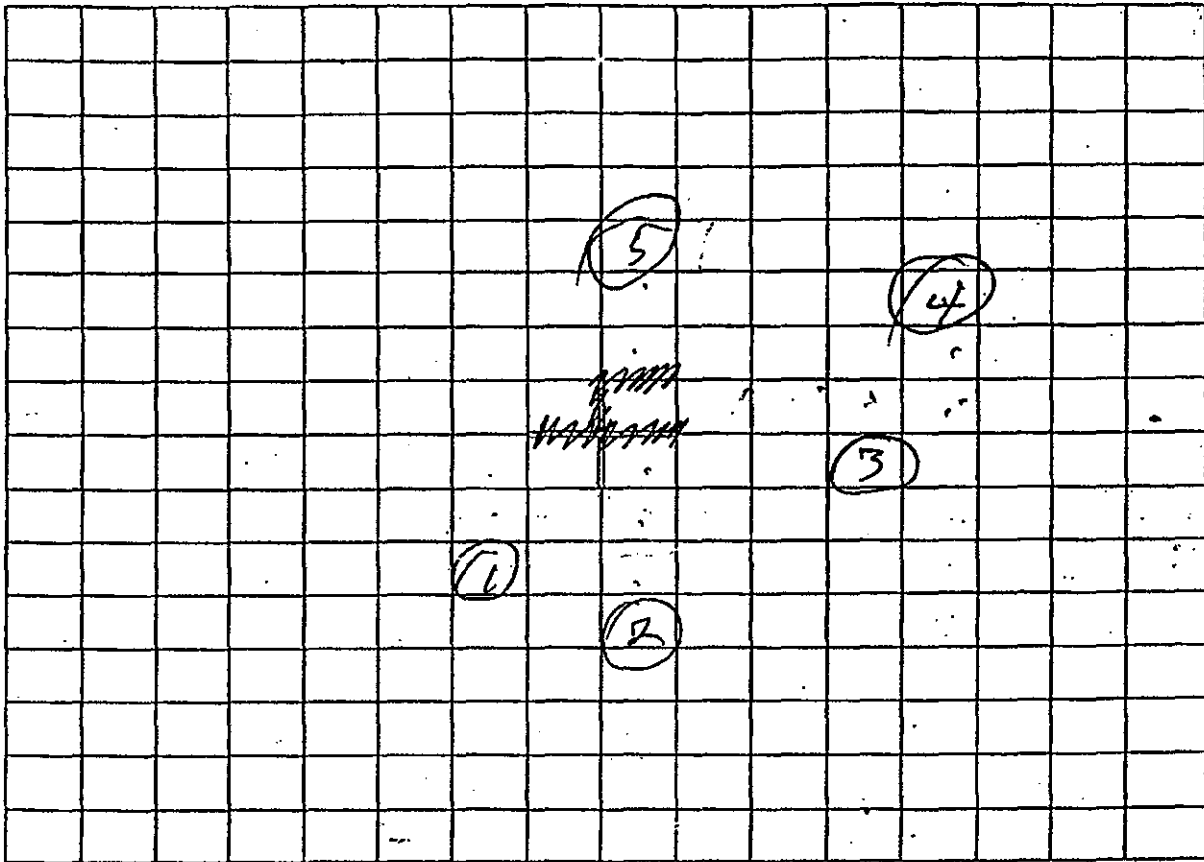
STR. #	GRID # SQUARE #	TYPE	STRUCTURE	LENGTH (μ m)	WIDTH (μ m)	CONFIRMATION		
						MORPH.	SAED	EDS
26	CNT	C	M-F	110	0105	/	/	
27		C	B	610	0115	/	/	
28		C	M-B	215	012	/	/	
29		C	F	810	0105	/	/	
30		C	F	710	0105	/	/	PO
31	2-1	C	M-F	210	0105	/	/	
32		C	C-F	510	0105	/	/	
33		C	F	610	0105	/	/	
34		C	B	615	012	/	/	
35		C	M-F	1510	0105	/	/	
36		C	F	2610	0105	/	/	
37		C	F	215	0105	/	/	
38		C	B	810	012	/	/	
39		C	F	410	0105	/	/	
40		C	F	215	0105	/	/	PO
41	-2	C	M-F	1210	0105	/	/	
42		C	C-F	215	0105	/	/	
43		C	C-F	210	0105	/	/	
44		C	F	215	0105	/	/	
45		C	M-F	310	0105	/	/	
46		C	F	210	0105	/	/	
47		C	M-F	410	0105	/	/	
48	-3	C	M-F	810	0105	/	/	
49		C	M-B	815	012	/	/	
50		C	F	610	0105	/	/	PO
51		C	M-F	215	0105	/	/	
52	-4	C	F	510	0105	/	/	
53		C	M-F	810	0105	/	/	
54		C	M-F	415	0105	/	/	
55	-5	C	F	710	0105	/	/	

[illegible]

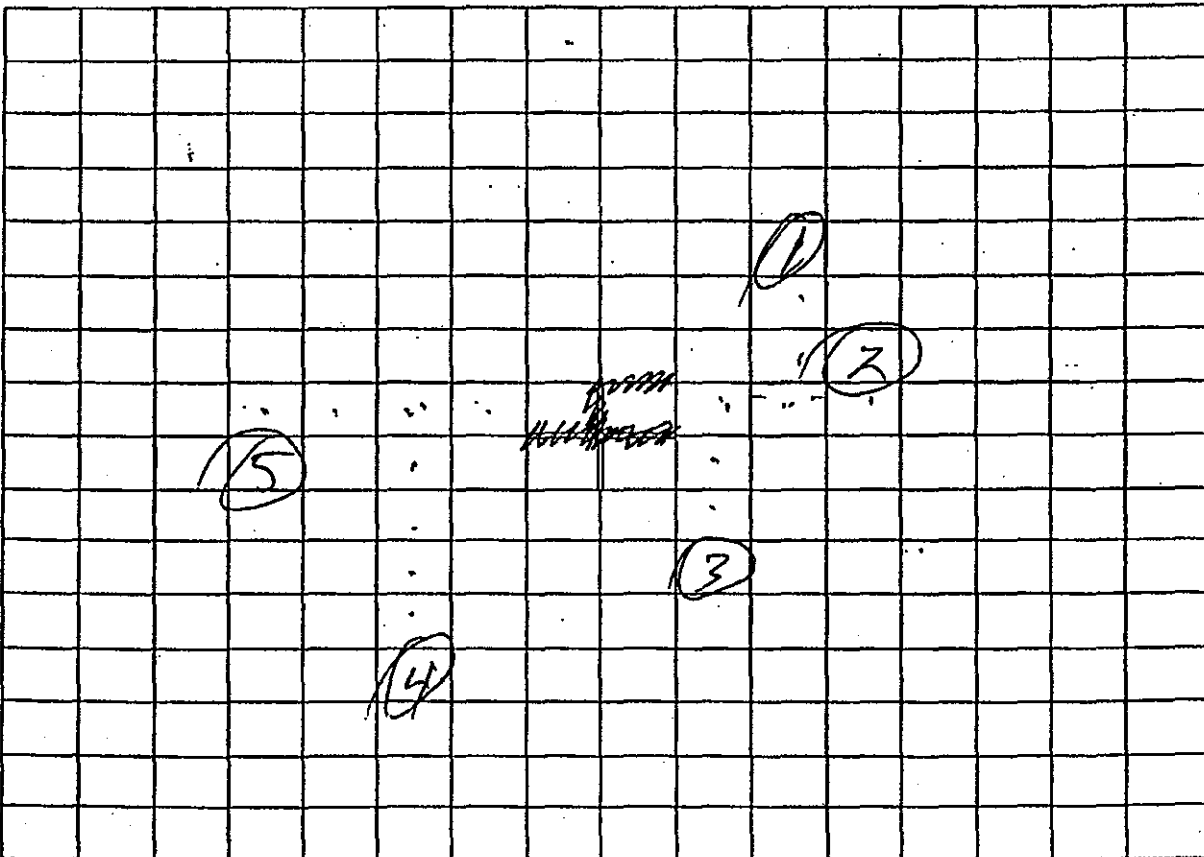
MAS Job Number: M

Location of Grid Openings, (GO) Counted in the Analysis

Grid 7:



Grid 8:



MATERIALS ANALYTICAL SERVICES, INC.
DUST SAMPLE ANALYSIS
Dust Sampling Method: Micro SocClient: Law AtlantaAccelerating Voltage: 100 kVSample ID: A88-120.17-11Indicated Mag: 25 KXMAS Job Number: M 1811-11Screen Mag: 20 KXDate Sample Analyzed: 4-24-96Microscope Number: 1 2 3 4 5Number of Openings/Grids Counted: 1012Filter Type: MCE PCGrid Accepted, Low Mag: Yes NoFilter Size: 25mm, 37mm, 47mmPercent Loading: 3 %Filter Pore Size (um): 0.45Grid Box #: 1042Grid Opening: 1) 92 um x 92 um2) 94 um x 93 umAnalyst: [Signature]Reviewer: [Signature]**Calculation Data:**Counting Rules: **AHERA****LEVEL II**Effective Filter Area in mm²: (A) 1339Number of Grid Openings Examined: (B) 10Average Grid Opening Area in mm²: (C) 0.008603Total Volume of Original Suspension in ml: (D) 100Equivalent Volume of Original Suspension Filtered in ml: (E) 10 (1:10)Area Sampled in sq. ft./cm²: (F) 0.416 sq. ft. 387.1 cm²Total Number of Asbestos Structures Counted: (G) 2Number of Asbestos Structures between 0.5 and 5 microns: 2 Structures ≥ 5 microns: 0**FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:**

$$\frac{A}{B} * \frac{D}{C} * \frac{1}{E} * G = (\text{asbestos structures per sq.ft. or cm}^2)$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft.
7.483 x 10⁵Structures per cm²
8.042 x 10²

Results for Structures ≥ 5 microns:

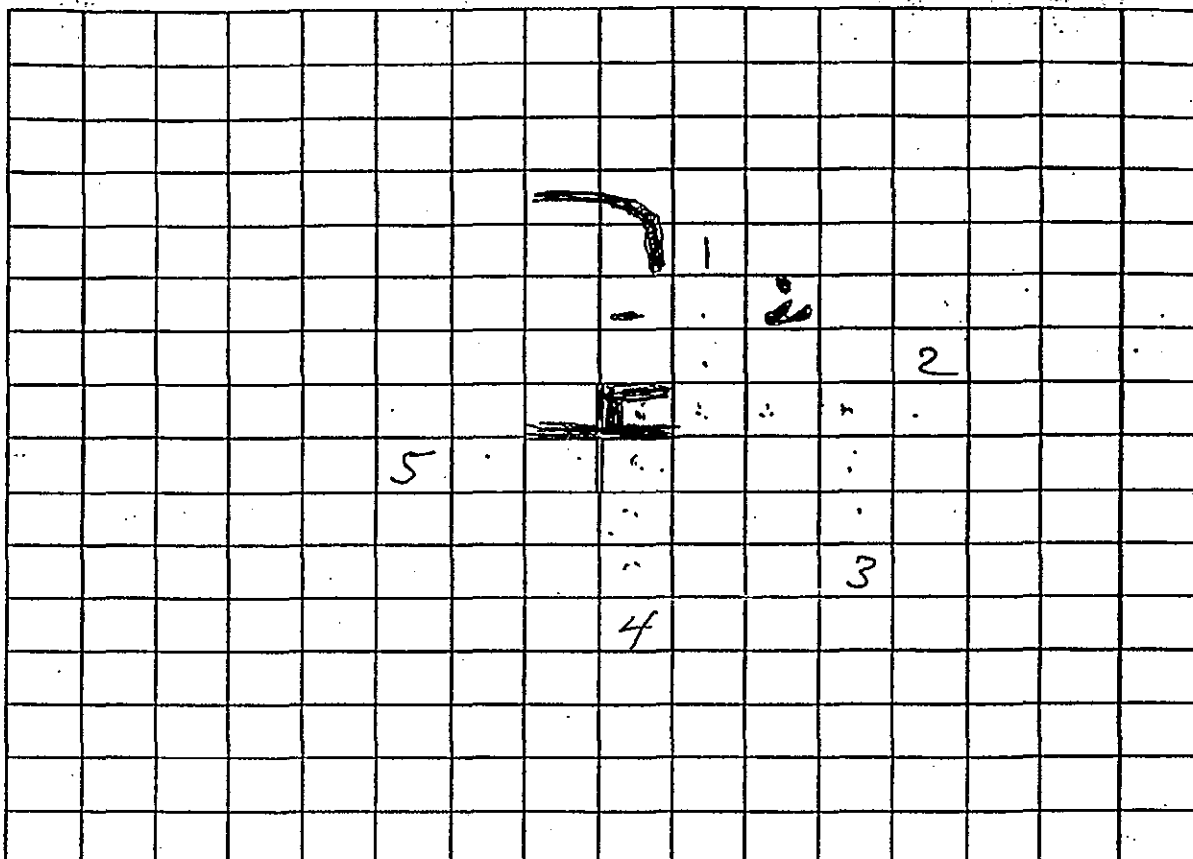
Structures per sq.ft.
N/AStructures per cm²
N/A

MORPH = MORPHOLOGY
SAED = SELECTED AREA ELECTRON DIFFRACTION
EDS = ENERGY DISPERSIVE X-RAY SPECTROSCOPY
IR = INTERROW SPACING
NP = NO PATTERN
P.O. = PRINTOUT OF EDS

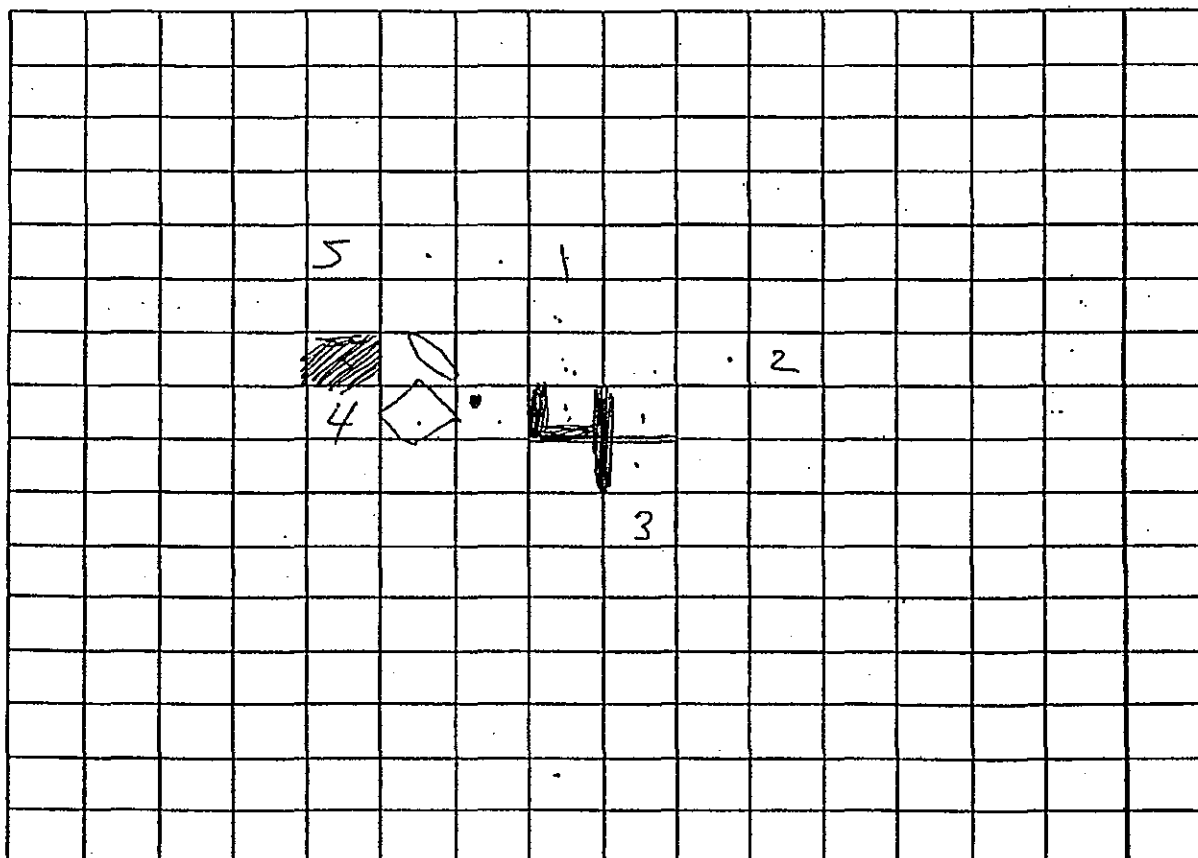
MAS Job Number: M 1811-11

Location of Grid Openings, (GO) Counted in the Analysis

Grid 1:



Grid 2:



[illegible]

PROJECT NAME: Fauc Assoc. / Residential DATE OF PREP: 6/25/89
 PROJECT NUMBER: M1811
 TYPE OF SAMPLES: DUST

RUSH: ☐
 RTA: ☐

PREP TECH: DA
 DIRECT PREP TECHNIQUE: Dust Method

LAB I.D. #:	CLIENT I.D. #:	FILTER TYPE	VOLUME FILTERED NO. 1	VOLUME FILTERED NO. 2	VOLUME FILTERED NO. 3	TOTAL SUSPENSION VOLUME	COMMENTS:
M1811-10	A88-120-17-16	47mm MCE	1ml			100ml 104.100ml	
M1811-11	A88-120-17-11	"	10ml			100ml	
M1811-12	A88-120.15-1	"	10ml			100ml	6-12 done on 6/24/89
—	Fal Blank	"				100ml	Box 26
M1811-13	A88-120.15-2	47mm MCE	1ml			100ml	
M1811-14	A88-120.15-3	"	5ml			100ml	
M1811-15	A88-120.15-4	"	10ml			100ml	
M1811-16	A88-120.15-5	"	25ml			100ml	
M1811-17	A88-120.15-6	"	10ml			100ml	
M1811-18	A88-120.15-7	47mm MCE	10ml			100ml	

PROJECT NAME: Law Assoc / PredentialDATE OF PREP: 6/25/89PROJECT NUMBER: M1811TYPE OF SAMPLES: DUSTRUSH: ☐RTA: ☐PREP TECH: DTADIRECT PREP TECHNIQUE: Must Method

LAB I.D. #:	CLIENT I.D. #:	FILTER TYPE	VOLUME FILTERED NO. 1	VOLUME FILTERED NO. 2	VOLUME FILTERED NO. 3	TOTAL SUSPENSION VOLUME	COMMENTS:
M1811-1	A88-120-17-1	47mm MCE	10ml			100ml	
M1811-2	A88-120-17-2	"	3ml			100ml	
M1811-3	A88-120-17-3	"	20ml			100ml	
M1811-4	A88-120-17-4	"	30ml			100ml	
M1811-5	A88-120-17-5	47mm MCE	1ml			100ml	1-5 done on 6/22/89
—	Lab Blank	"				100ml	Box 26
M1811-6	A88-120-17-6	"	20ml			100ml	
M1811-7	A88-120-17-7	"	20ml			100ml	
M1811-8	A88-120-17-8	"	20ml			100ml	
M1811-8	A88-120-17-8	47mm MCE	30ml			100ml	

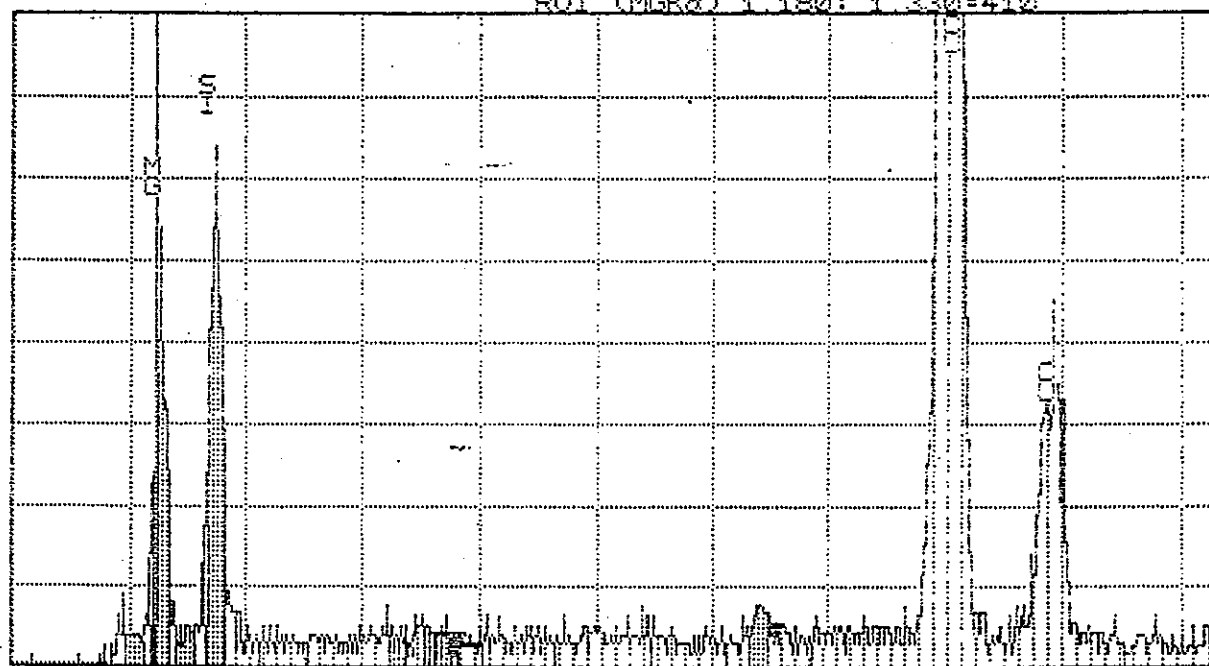
MATERIALS ANALYTICAL SERVICES

SUN 14-APR-96 09:50

Cursor: 1.230keV = 34

ROI (SIK α) 1.660: 1.810=536

ROI (MGK α) 1.180: 1.330=410



0.000

VFS = 64

10.240

49

M1811-2 CHRYSOTILE

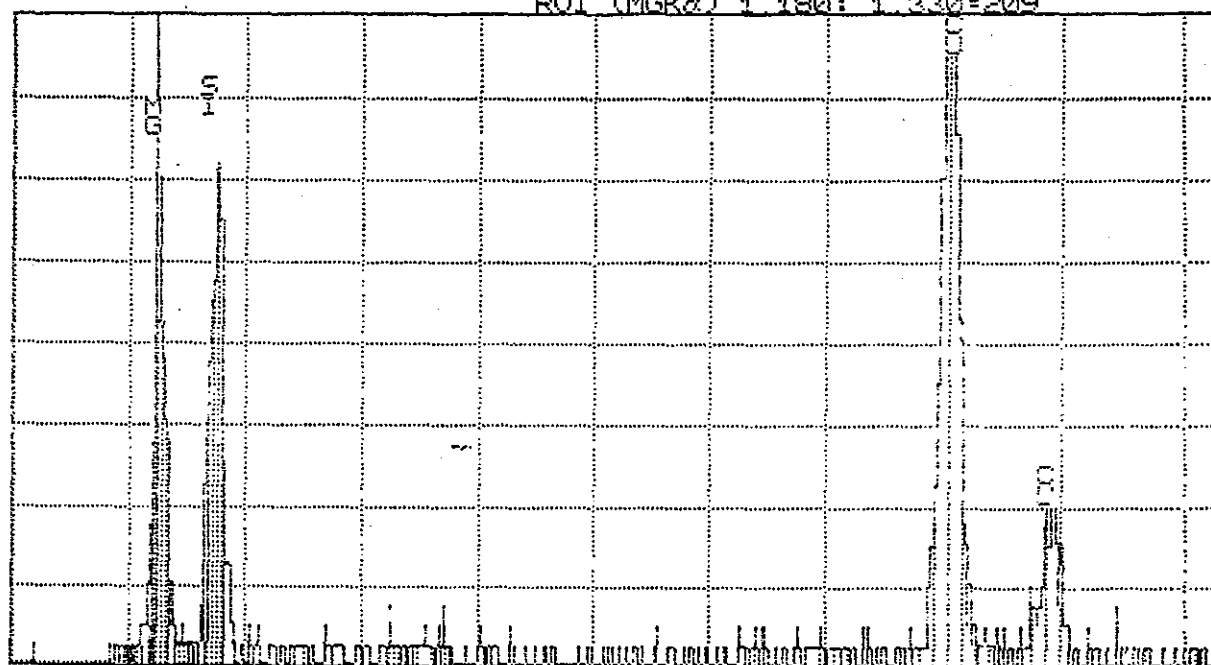
MATERIALS ANALYTICAL SERVICES

SUN 14-APR-96 10:00

Cursor: 1.230keV = 15

ROI (SIK α) 1.660: 1.810=289

ROI (MGK α) 1.180: 1.230=209



0.000

VFS = 32

10.240

30

M1811-2 CHRYSOTILE

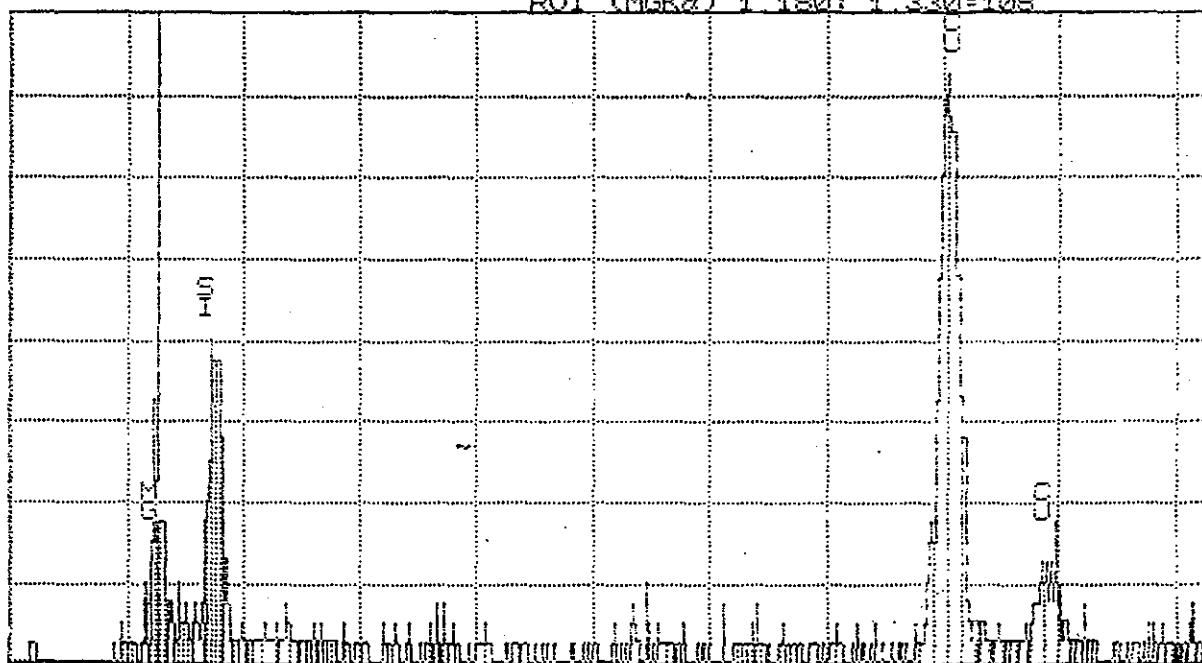
MATERIALS ANALYTICAL SERVICES

SUN 14-APR-96 10:07

Cursor: 1.260keV = 7

ROI (SIK α) 1.660: 1.810=195

ROI (MGK α) 1.180: 1.330=108



0.000

VFS = 32

10.240

53

M1911-2 CHRYSOTILE

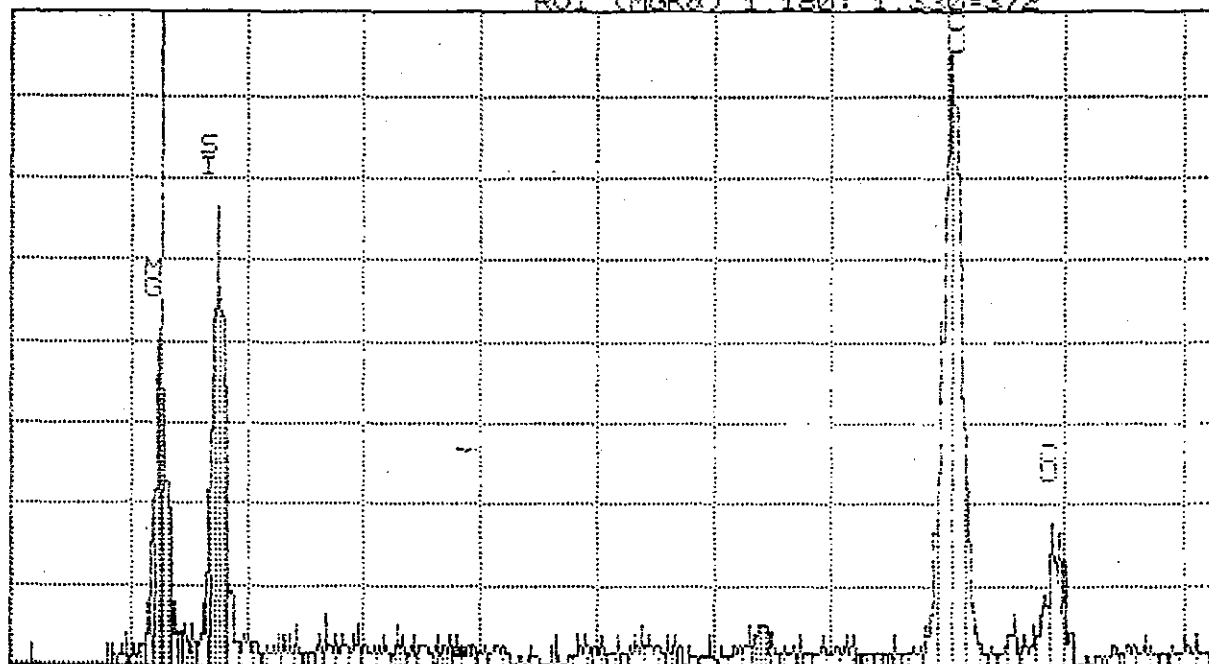
MATERIALS ANALYTICAL SERVICES

SUN 14-APR-96 10:17

Cursor: 1.260keV = 43

ROI (SiK α) 1.660: 1.810=482

ROI (MgK α) 1.180: 1.330=372



0.000

VFS = 64

10.240

50

M1811-2 CHRYSOTILE

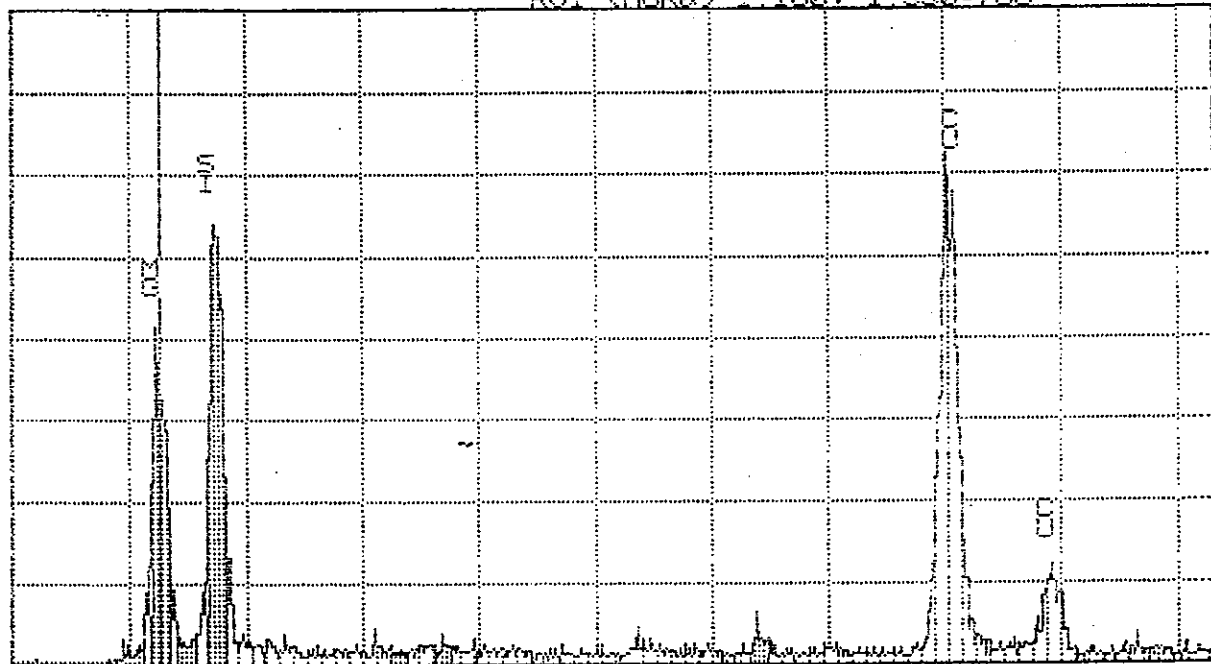
MATERIALS ANALYTICAL SERVICES

SUN 14-APR-96 10:25

Cursor: 1.260keV = 67

ROI (SiK α) 1.660: 1.810=1008

ROI (MgK α) 1.180: 1.330=766



0.000

VFS = 128

10.240

38 M1811-2 CHRYSOTILE

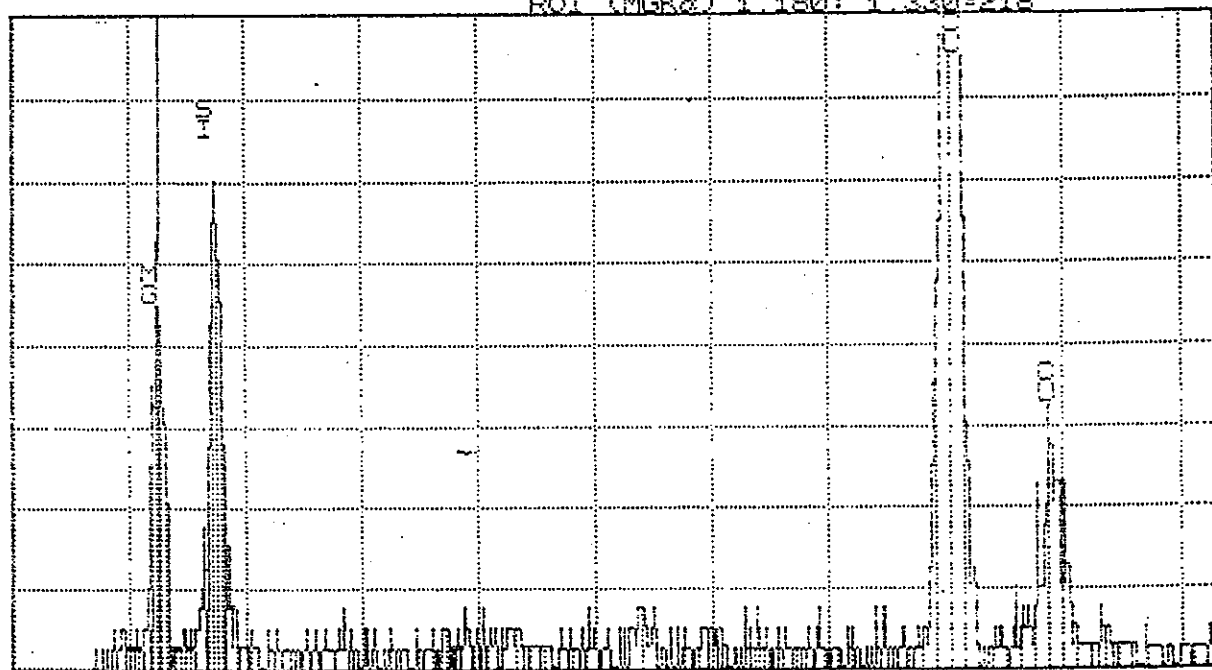
MATERIALS ANALYTICAL SERVICES

SUN 14-APR-96 10:33

Cursor: 1.260keV = 19

ROI (SIK α) 1.660: 1.810=248

ROI (MGK α) 1.180: 1.330=218



0.000

VFS = 32

10.240

47

M1811-2 CHRYSOTILE

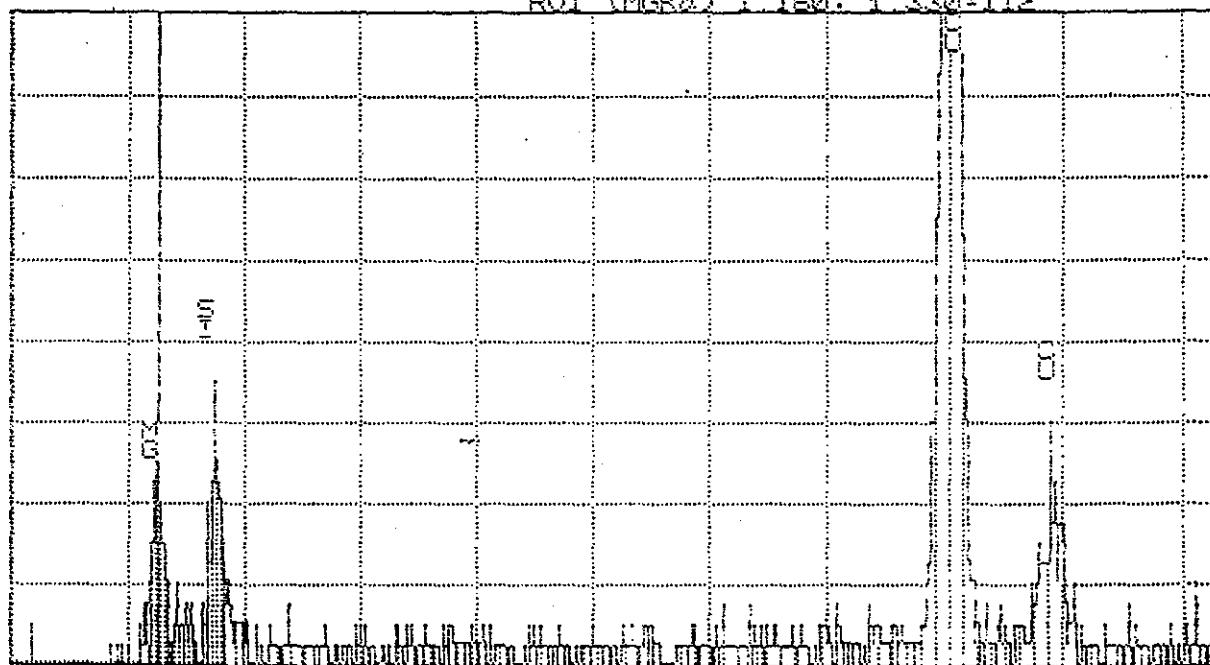
MATERIALS ANALYTICAL SERVICES

SUN 14-APR-96 11:57

Cursor: 1.260keV = 10

ROI (SIK α) 1.660: 1.810=119

ROI (MGK α) 1.180: 1.330=112



0.000

VFS = 32

10.240

48

M1811-3 CHRYSOTILE

28
START? DY1

28
START? DL
28
START? DY1
28

328 MATERIALS ANALYTICAL SERVICES

SAT 20-APR-96 10:46

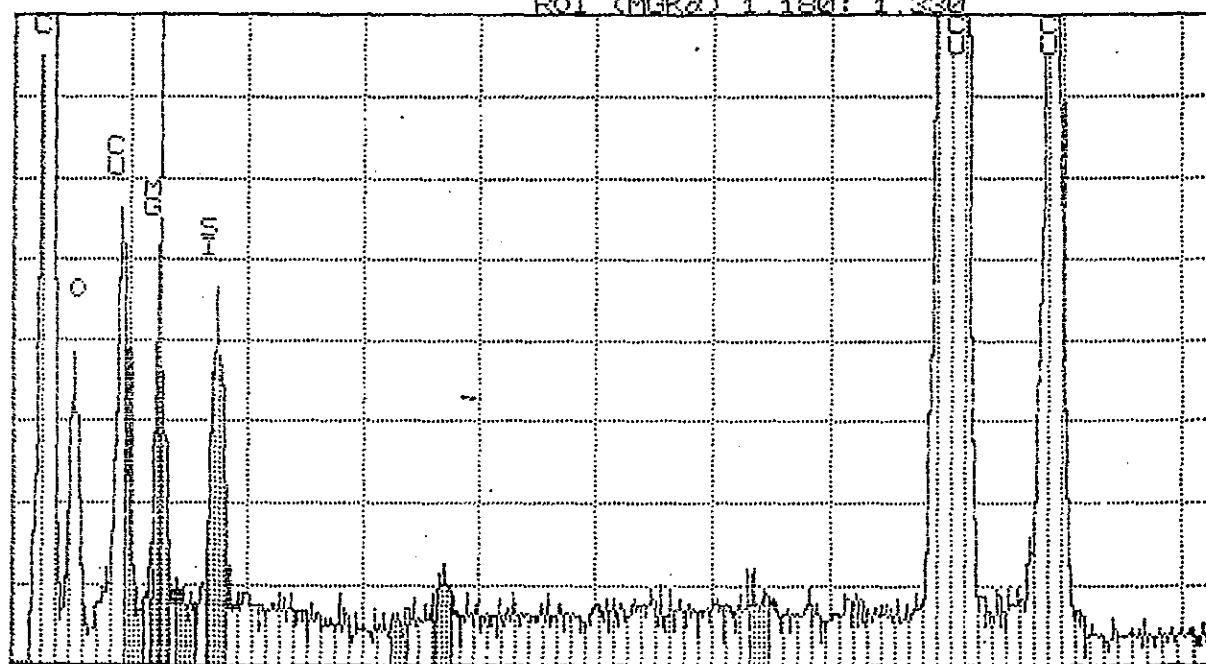
START? DY1

Cursor: 1.260keV = 66

ROI (SIK α) 1.660: 1.810

ROI (MGK α) 1.180: 1.330

28



0.000

VFS = 128

10.240

521

M1811-5 CHRYSOTILE

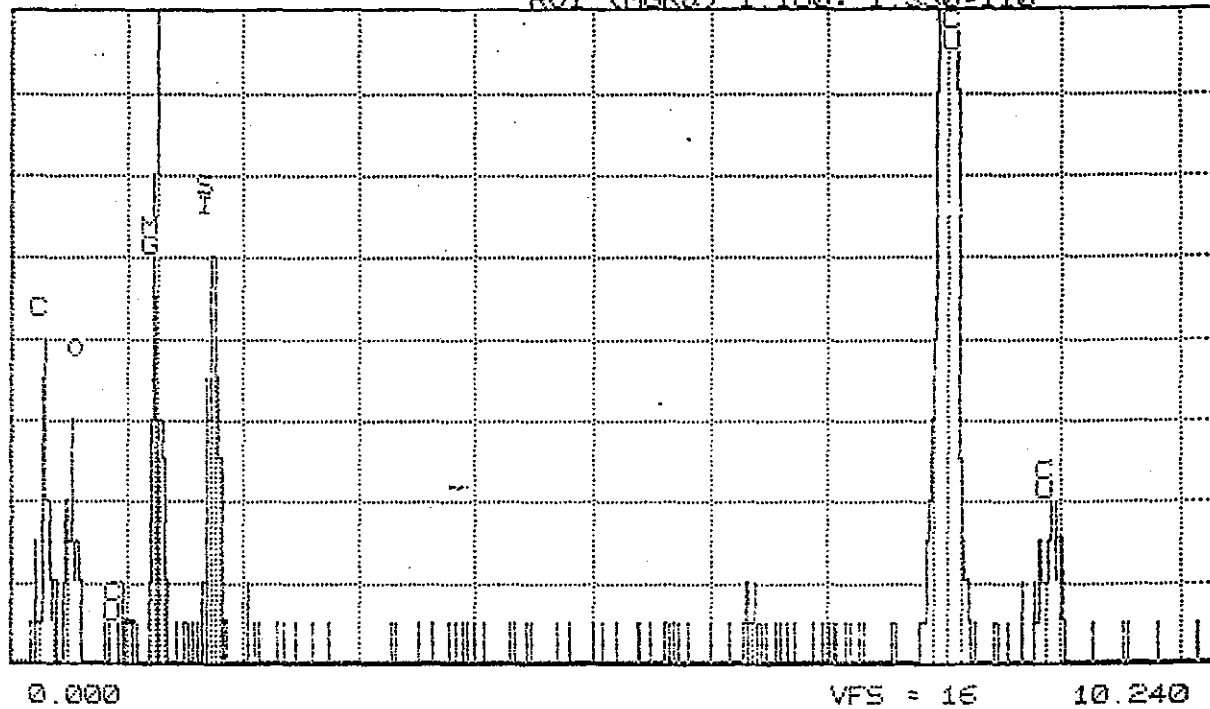
MATERIALS ANALYTICAL SERVICES

SAT 20-APR-96 11:20

Cursor: 1.260keV = 10

ROI (SIK α) 1.650: 1.810=103

ROI (MgK α) 1.180: 1.330=110



27

M1811-5 CHRYSTILE

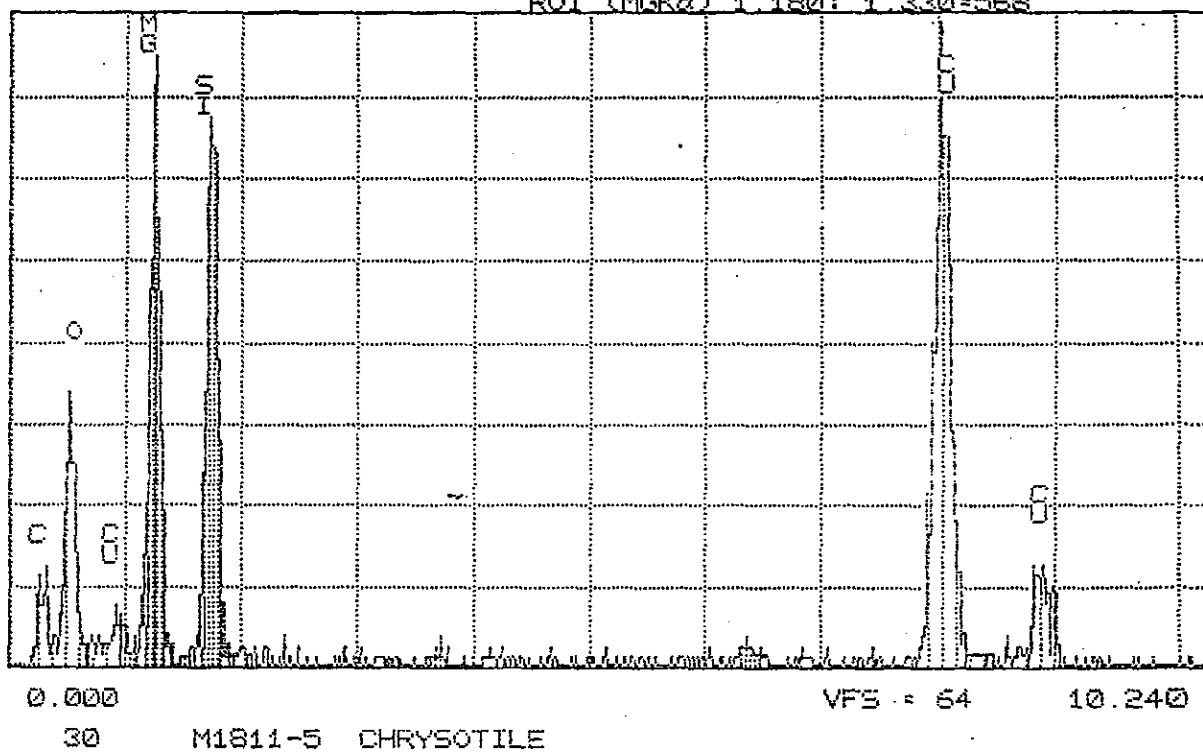
MATERIALS ANALYTICAL SERVICES

SAT 20-APR-96 11:45

Cursor: 1.260keV = 61

ROI (SIK α) 1.660: 1.810=583

ROI (MGK α) 1.180: 1.330=568



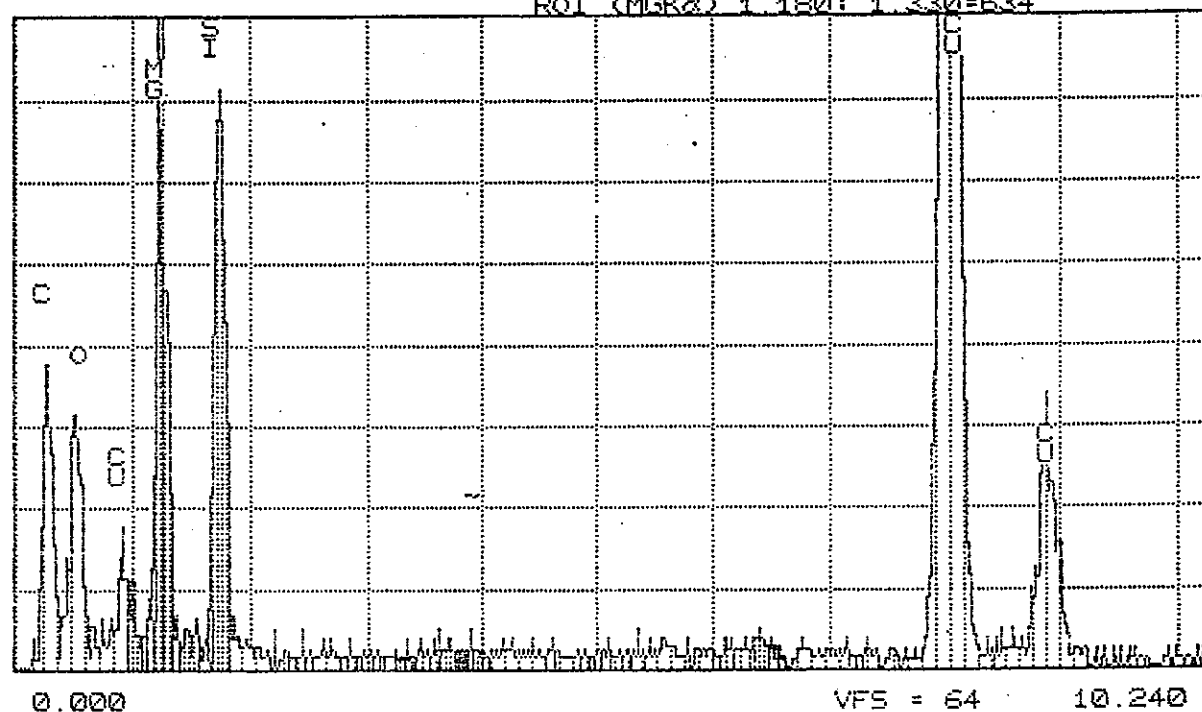
MATERIALS ANALYTICAL SERVICES

SAT 20-APR-96 12:05

Cursor: 1.260keV = 62

ROI (SIK α) 1.660: 1.810=602

ROI (MGK α) 1.180: 1.330=634



0.000

VFS = 64 10.240

100

M1811-5 CHRYSOTILE

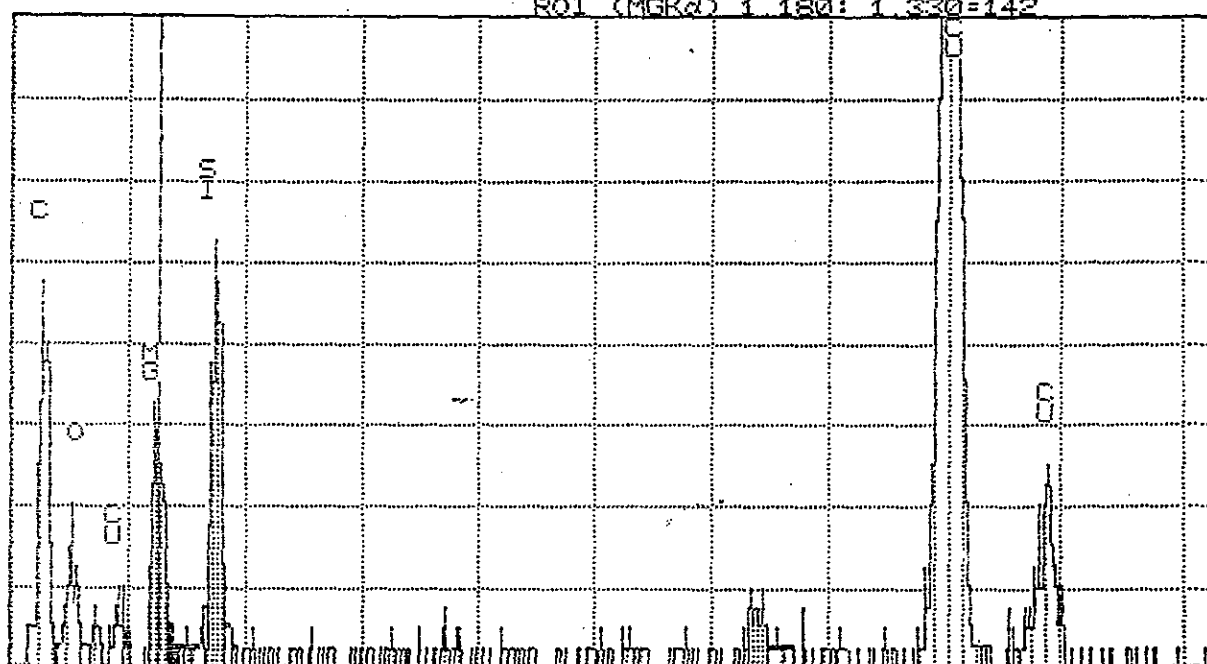
MATERIALS ANALYTICAL SERVICES

SAT 20-APR-96 12:13

Cursor: 1.260keV = 11

ROI (SIK α) 1.660: 1.810=203

ROI (MGK α) 1.180: 1.330=142



0.000

VFS = 32

10.240

66

M1811-5 CHRYSOTILE

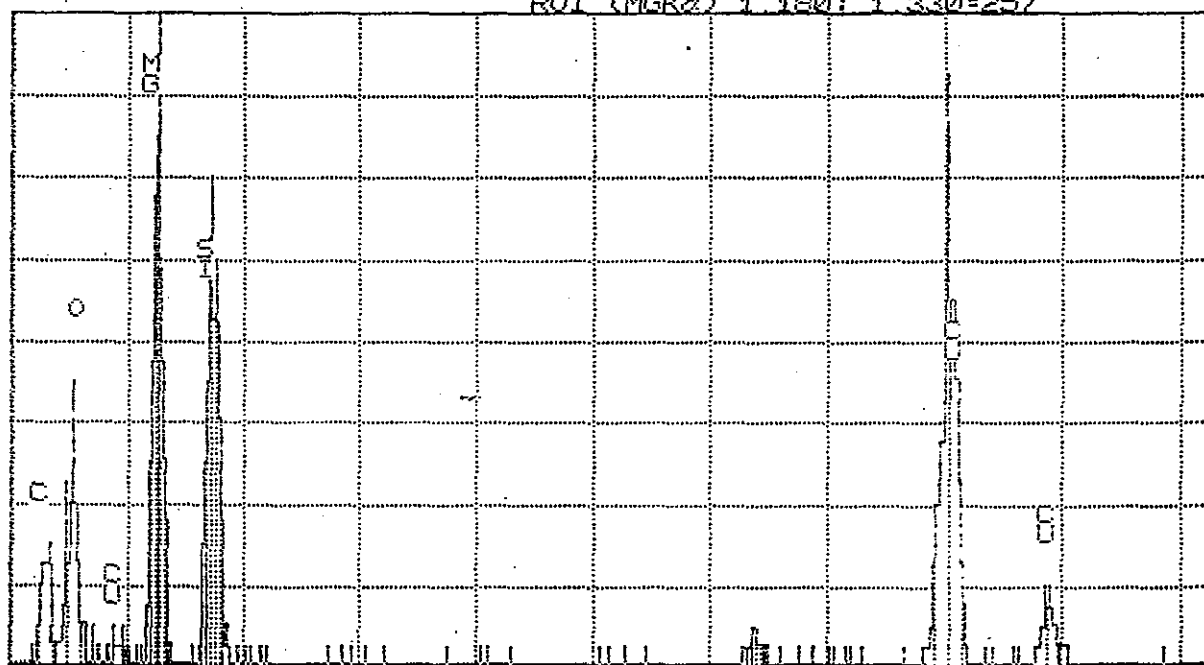
MATERIALS ANALYTICAL SERVICES

SAT 20-APR-95 14:08

Cursor: 1.260keV = 20

ROI (SIK α) 1.660: 1.910=246

ROI (MGK α) 1.180: 1.330=257



0.000

VFS = 32

10.240

13

M1811-5 CHRYSOTILE

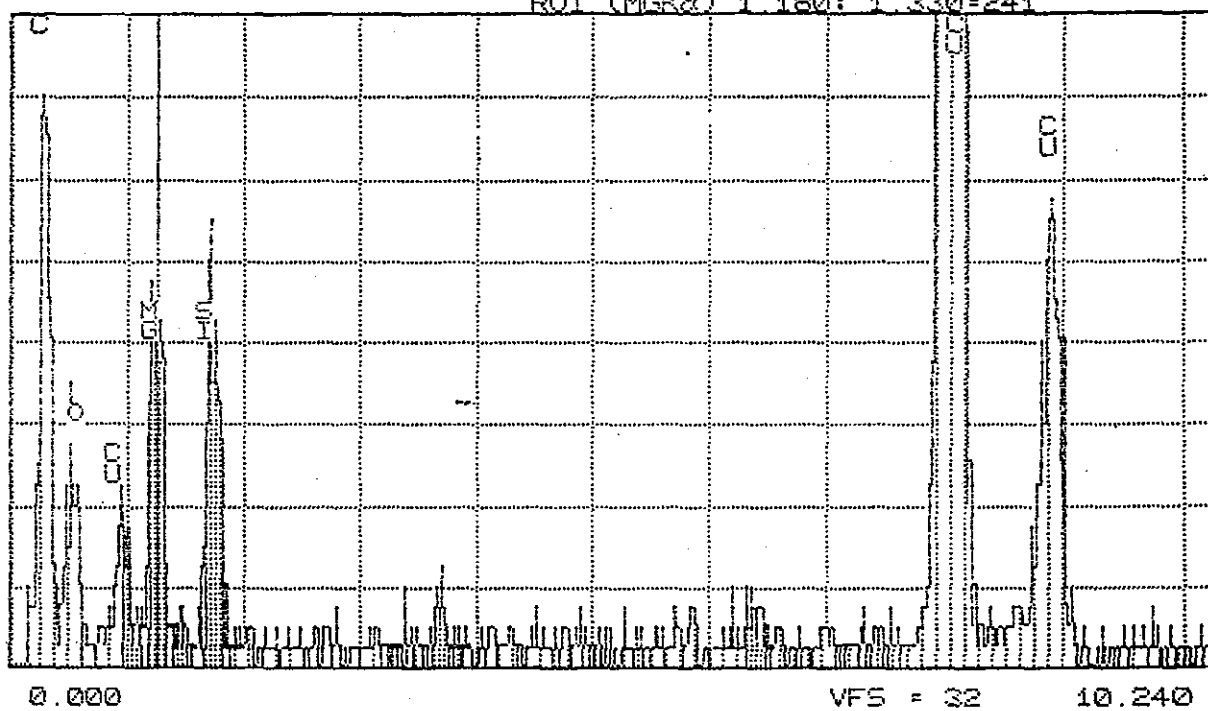
MATERIALS ANALYTICAL SERVICES

SAT 20-APR-96 14:21

Cursor: 1.260keV = 17

ROI (SIK α) 1.660: 1.810=222

ROI (MGK α) 1.180: 1.330=241



0.000

VFS = 32

10.240

91

M1811-5 CHRYSOTILE

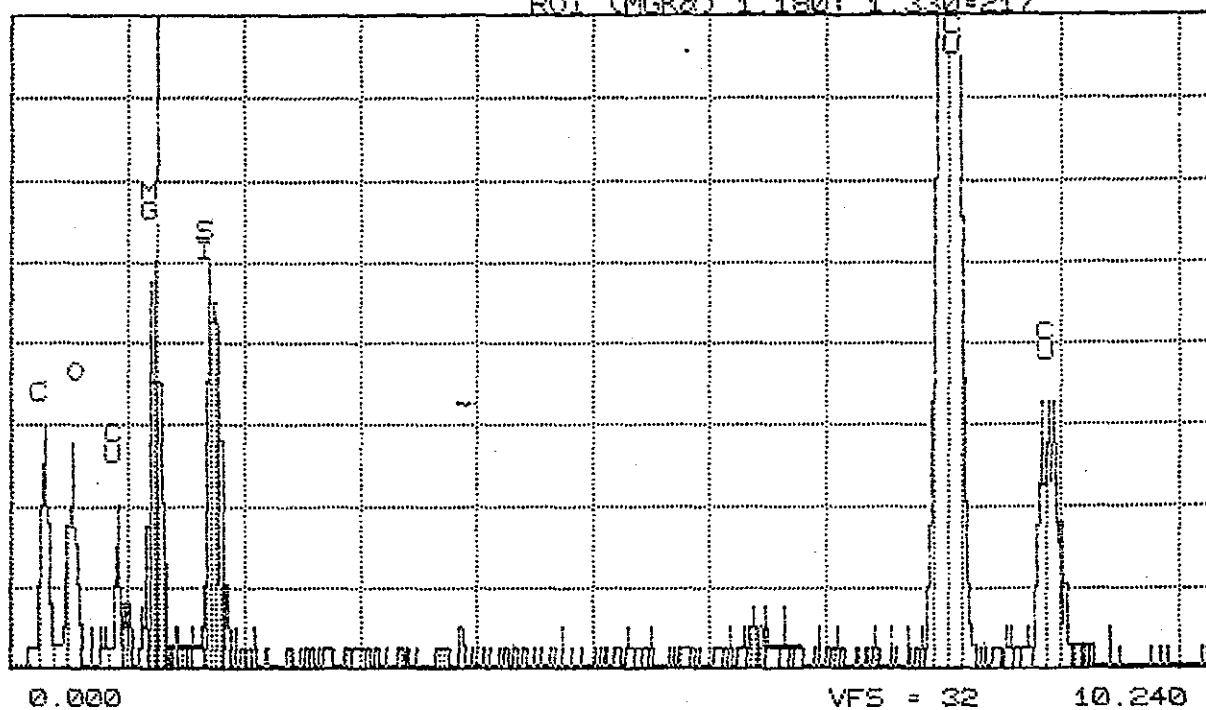
MATERIALS ANALYTICAL SERVICES

SAT 20-APR-96 14:29

Cursor: 1.260keV = 24

ROI (SIK α) 1.660: 1.810=207

ROI (MGK α) 1.180: 1.330=217



0.000

VFS = 32

10.240

63

M1811-5 CHRYSOTILE

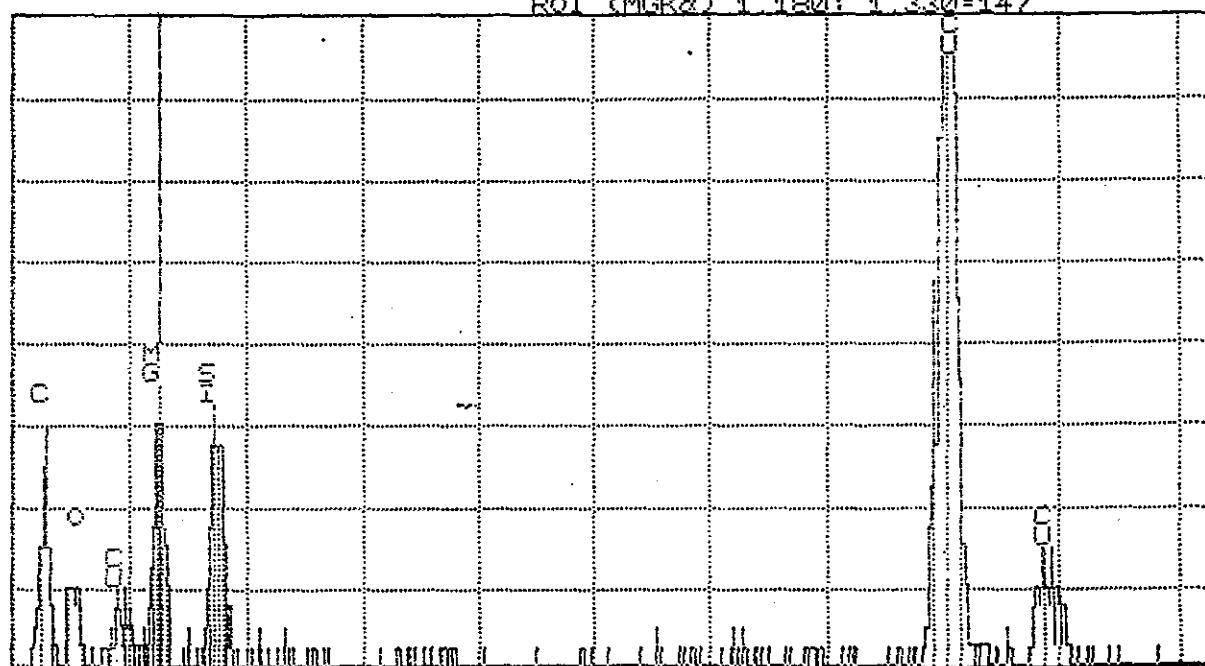
MATERIALS ANALYTICAL SERVICES

SAT 20-APR-96 14:37

Cursor: 1.250keV = 14

ROI (SIK α) 1.650: 1.810=142

ROI (MGK α) 1.180: 1.330=147



0.000

VFS = 32

10.240

45

M1811-5 CHRYSOTILE

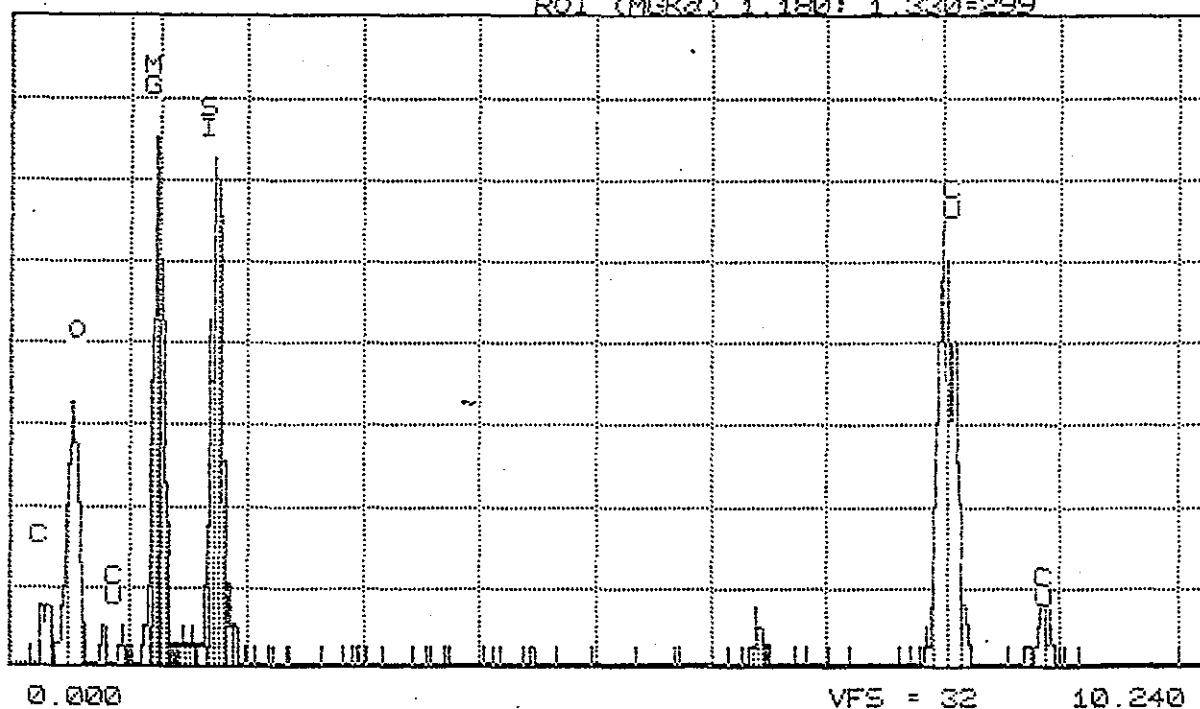
MATERIALS ANALYTICAL SERVICES

SAT 20-APR-96 14:41

Cursor: 1.260keV = 28

ROI (SIK α) 1.660: 1.810=255

ROI (MGK α) 1.180: 1.330=299



0.000

VFS = 32

10.240

9

M1811-5 CHRYSOTILE

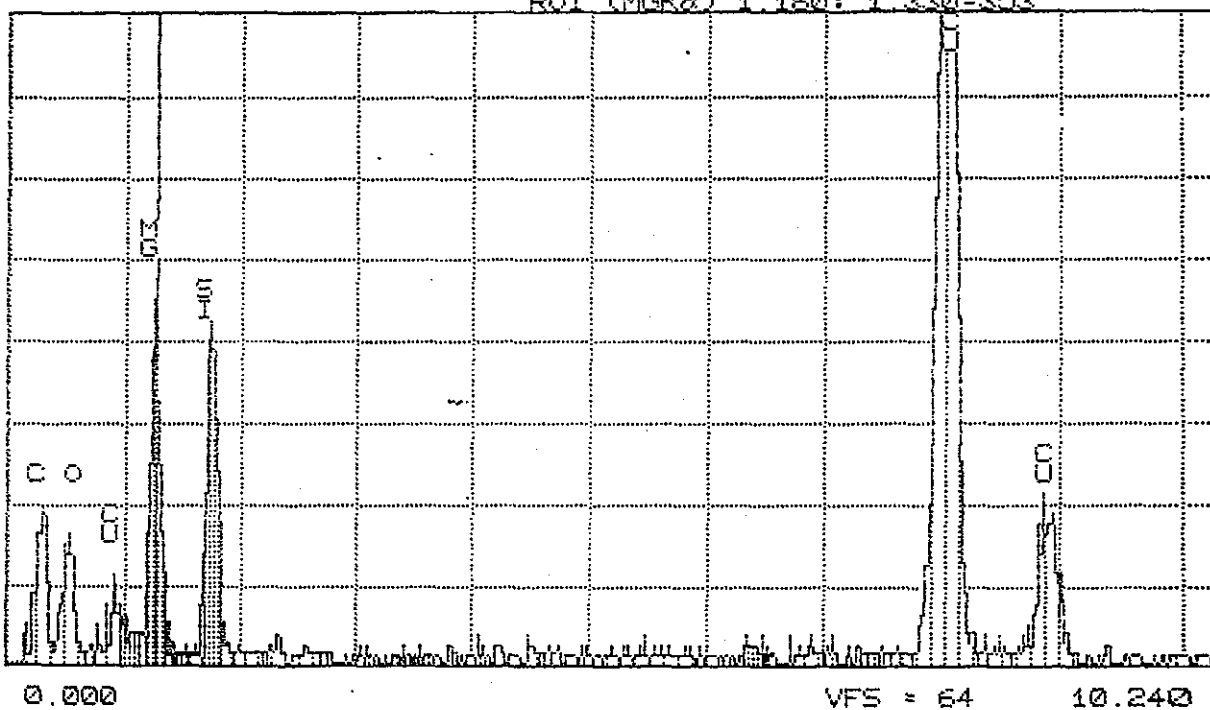
MATERIALS ANALYTICAL SERVICES

SAT 20-APR-96 14:52

Cursor: 1.250keV = 29

ROI (SIK α) 1.660: 1.810=352

ROI (MBK α) 1.180: 1.330=353



0.000

VFS = 64

10.240

73

M1811-5 CHRYSOTILE

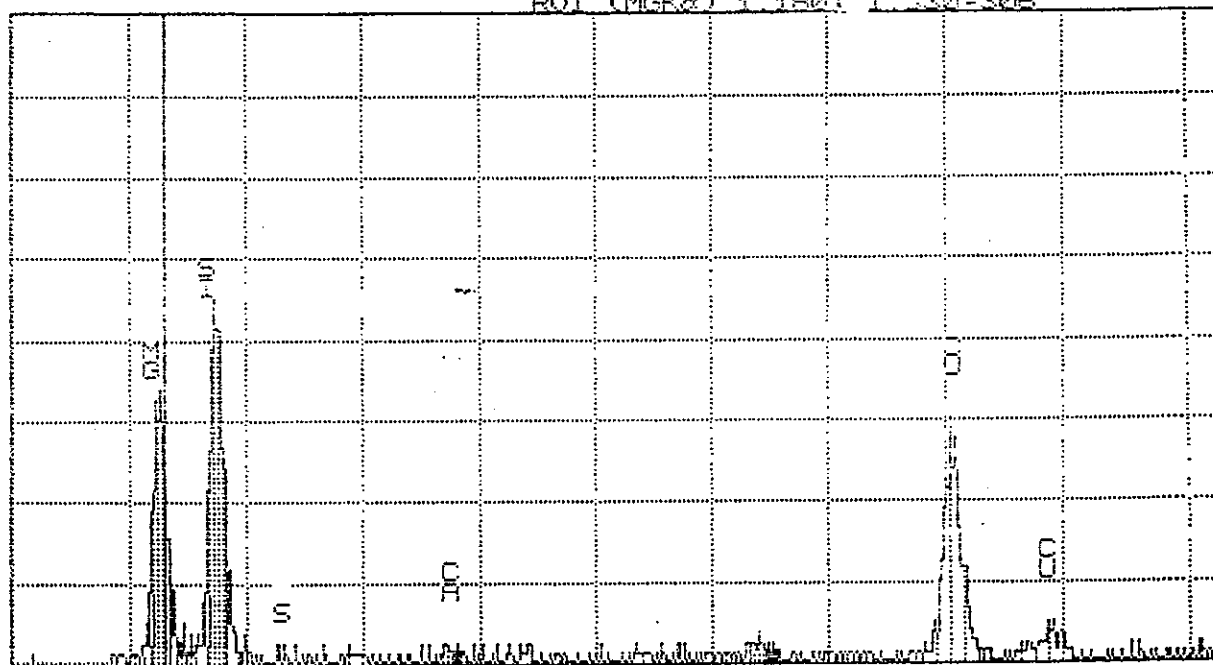
MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 13:54

Cursor: 1.310keV = 16

ROI (SIK α) 1.660: 1.810=407

ROI (MGK α) 1.180: 1.330=305



0.000

VFS = 64

10.240

27

M1811-6 ; CHRYSOTILE

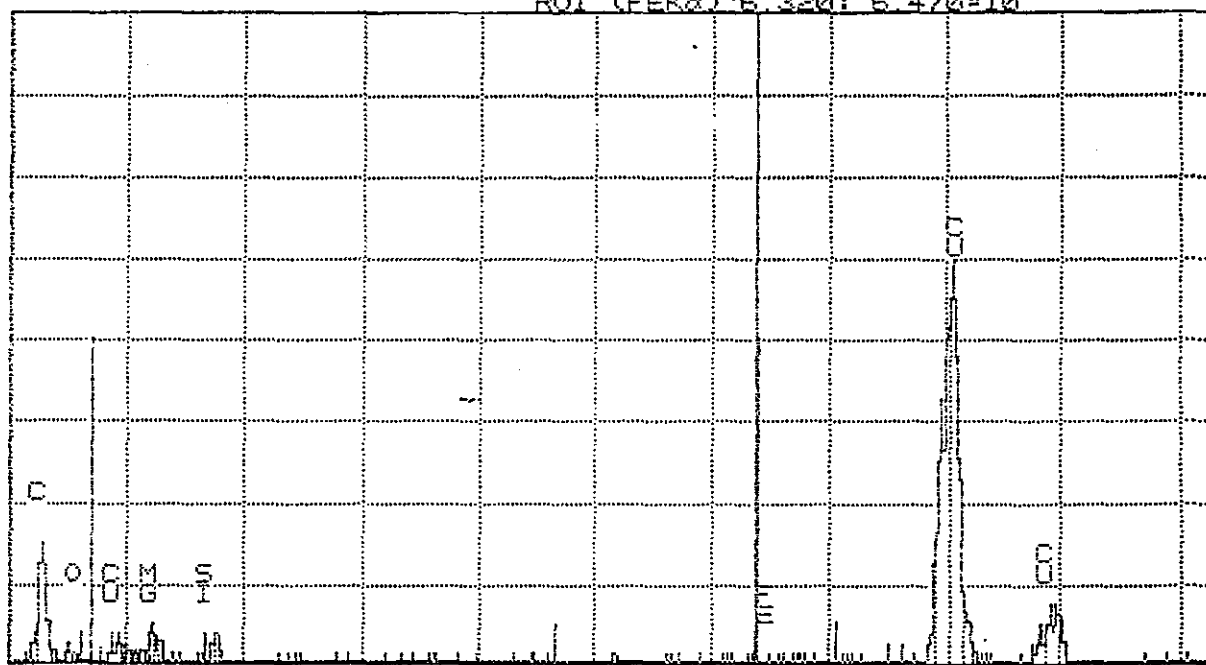
MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 13:45

Cursor: 6.380keV = 0

ROI (SIK α) 1.660: 1.810=32

ROI (FEK α) 6.320: 6.470=10



0.000 FE-26 K α = 6.40keV
22 M1811-7; CHRYSOTILE

VFS = 64 10.240

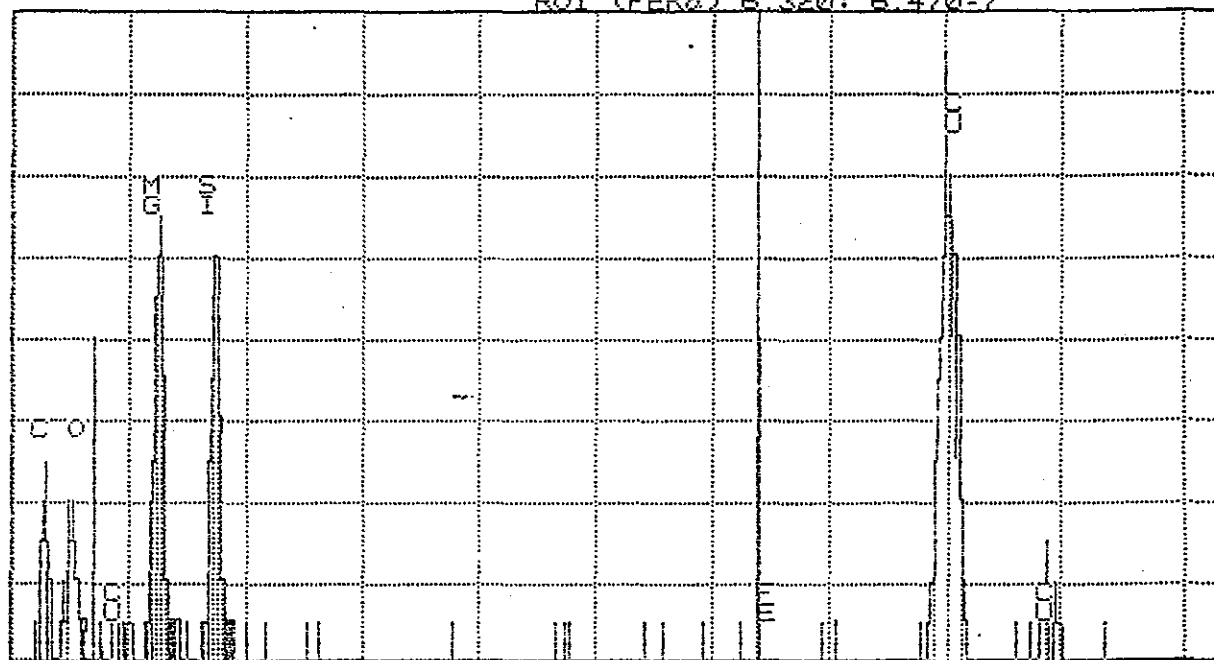
MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 14:13

Cursor: 6.380keV = 2

ROI (SiK α) 1.660: 1.810=90

ROI (FeK α) 6.320: 6.470=7



0.000 FE-26 K α = 6.40keV
7 M1811-7; CHRYSOTILE

VFS = 16 10.240

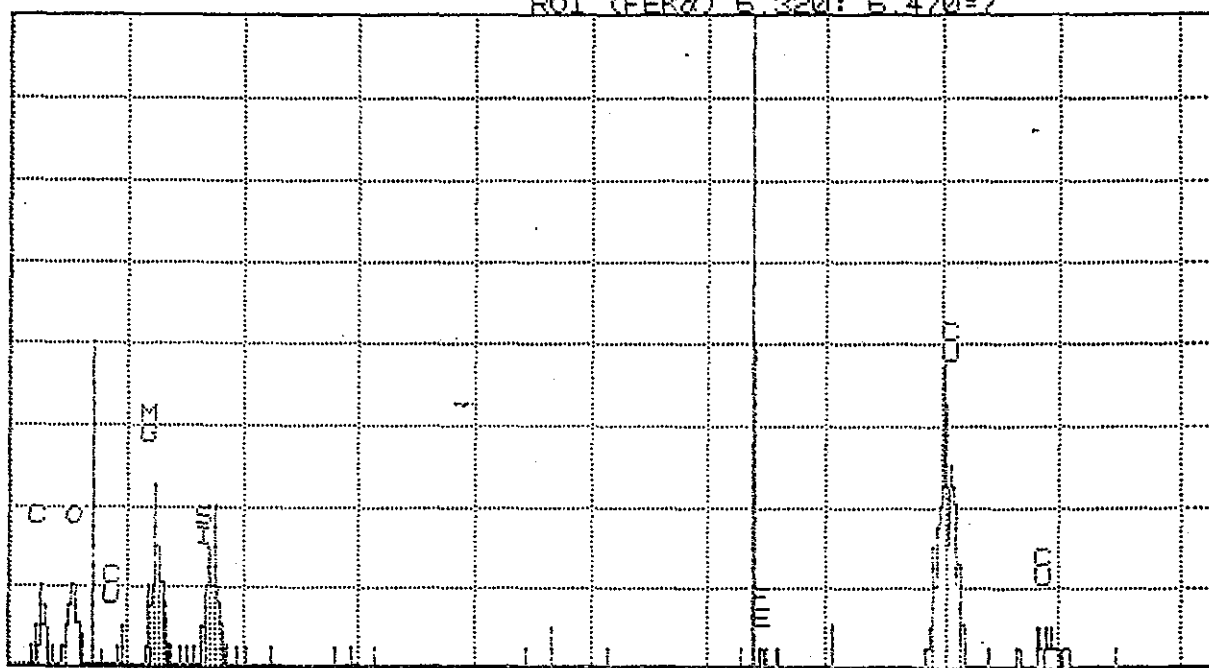
MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 14:20

Cursor: 6.380keV = 1

ROI (SIK α) 1.660: 1.810=73

ROI (FEK α) 6.320: 6.470=7



0.000 FE-26 K α = 6.40keV
6 M1811-7; CHRYSOTILE

VFS = 32 10.240

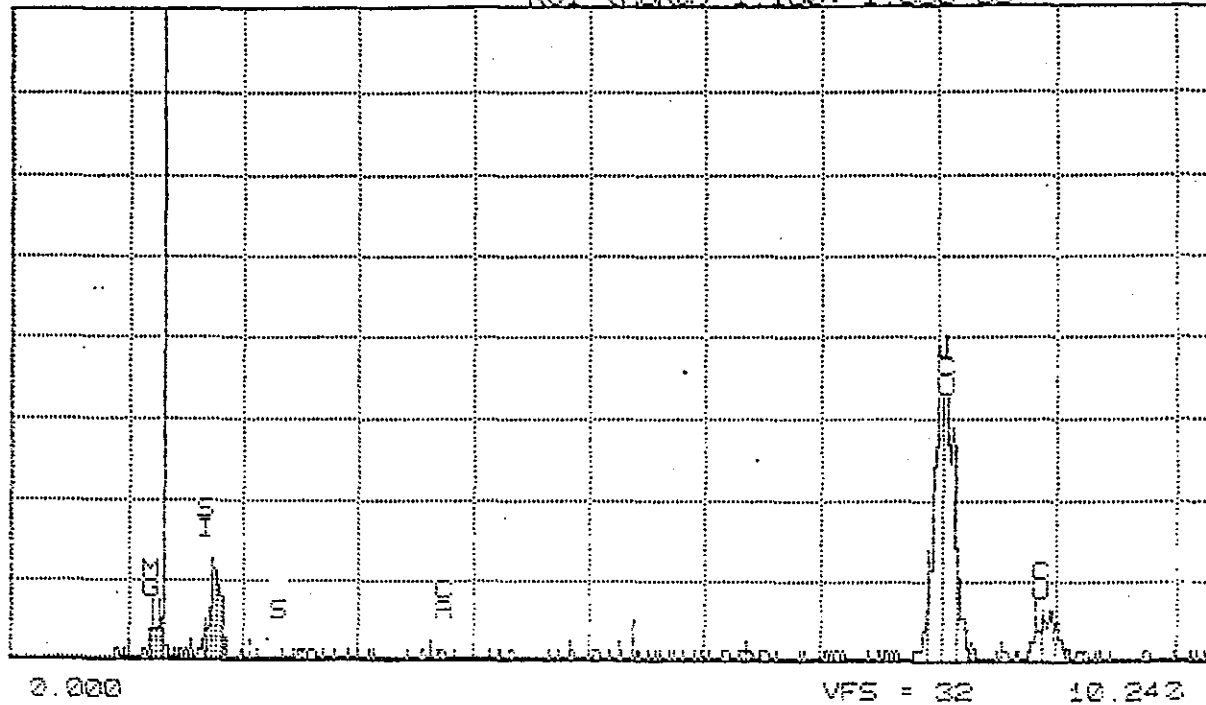
MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 15:21

Cursor: 1.310keV = 3

ROI (SIK α) 1.660: 1.810=97

ROI (MGK α) 1.180: 1.330=65



22 M1811-18; CHRYSOTILE

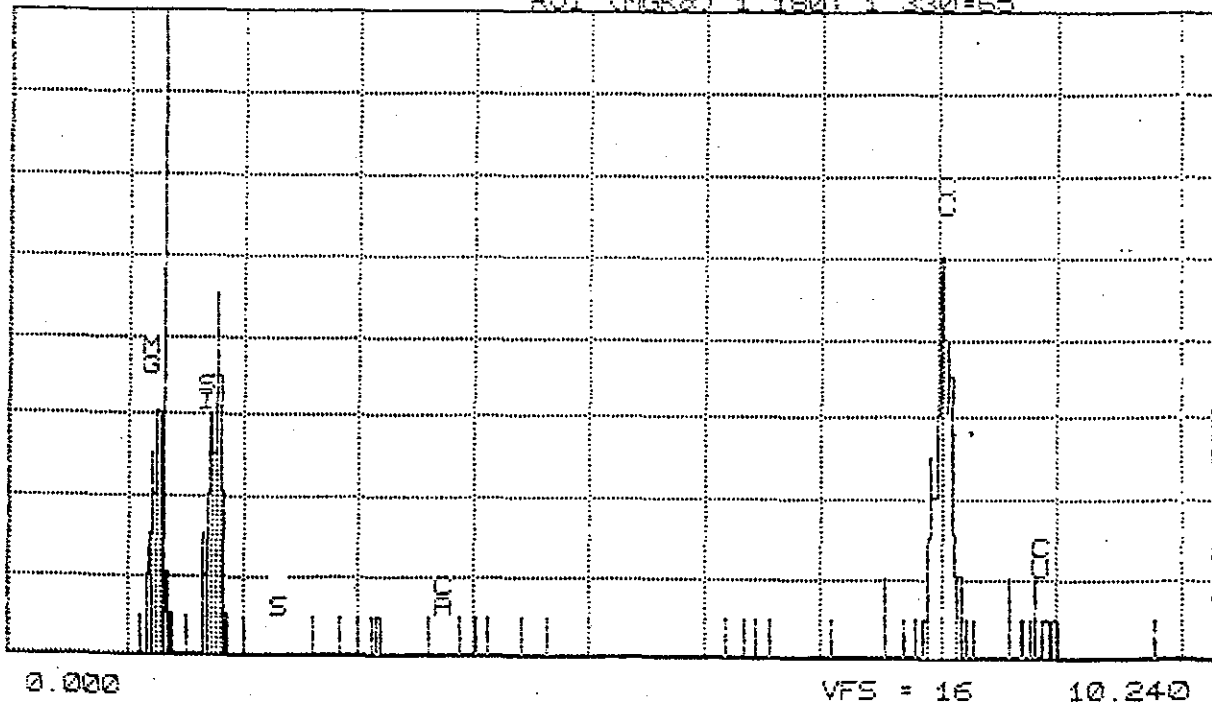
MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 15:33

Cursor: 1.310keV = 0

ROI (SIK α) 1.660: 1.810=86

ROI (MGK α) 1.180: 1.330=65

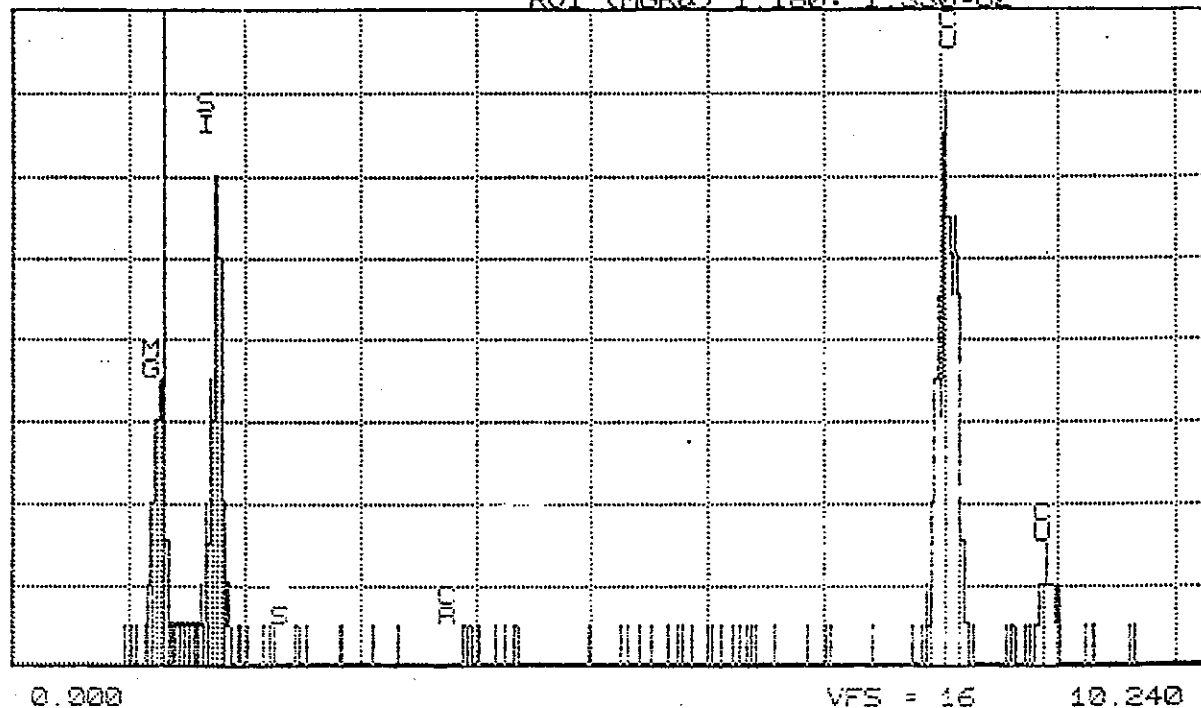


9 M1811-18; CHRYSOTILE

MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 15:35

Cursor: 1.310keV = 4

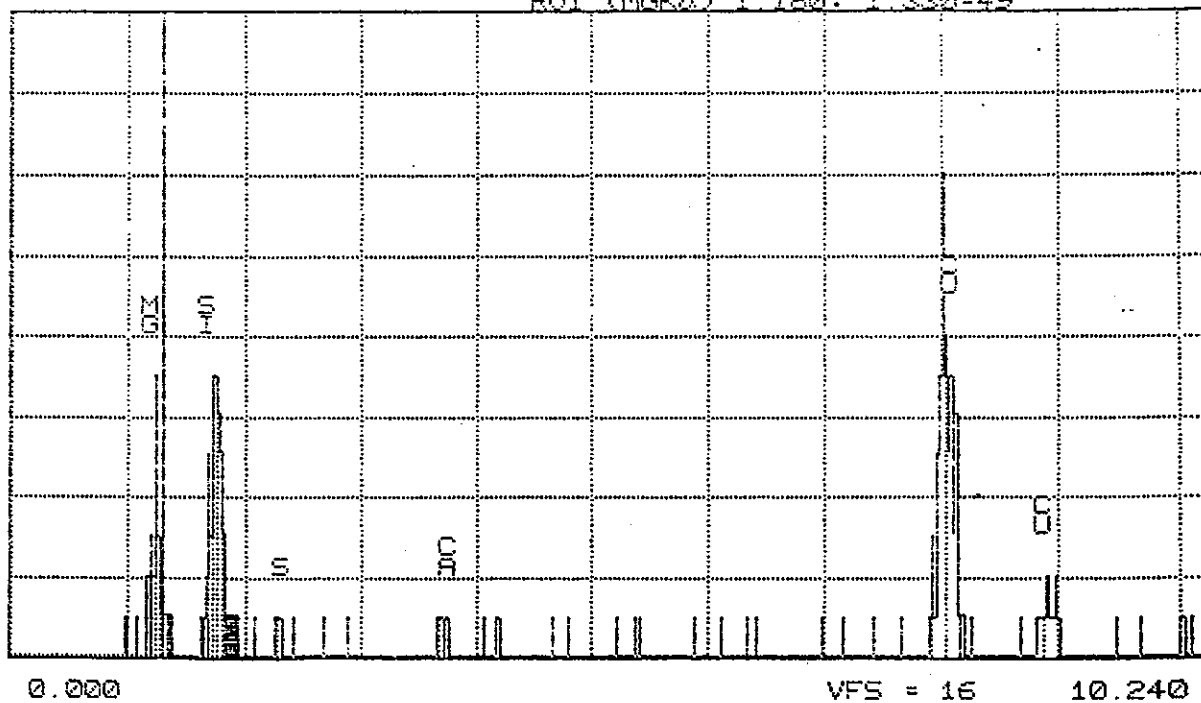
ROI (SIK α) 1.660: 1.810=116ROI (MGK α) 1.180: 1.330=82

9 M1811-68; CHRYSOTILE

MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 15:53

Cursor: 1.310keV = 4

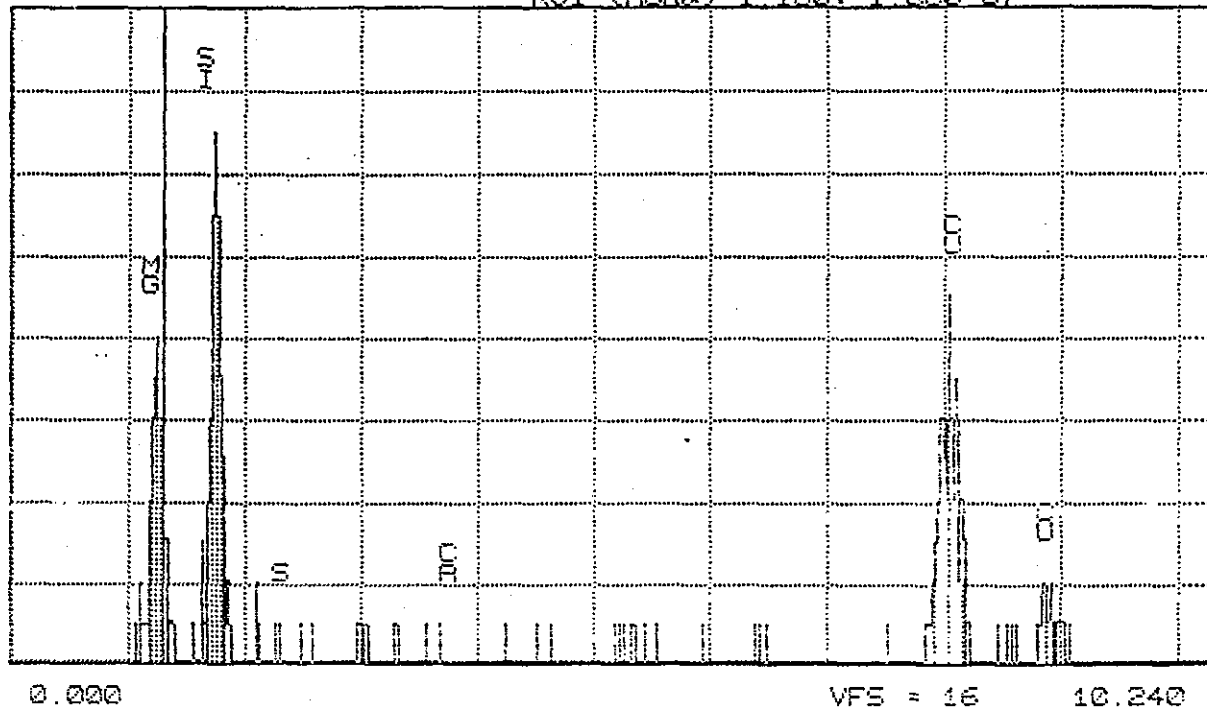
ROI (SIK α) 1.660: 1.810=76ROI (MGK α) 1.180: 1.330=49

10 M1811-68; CHRYSOTILE

MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 16:03

Cursor: 1.310keV = 2

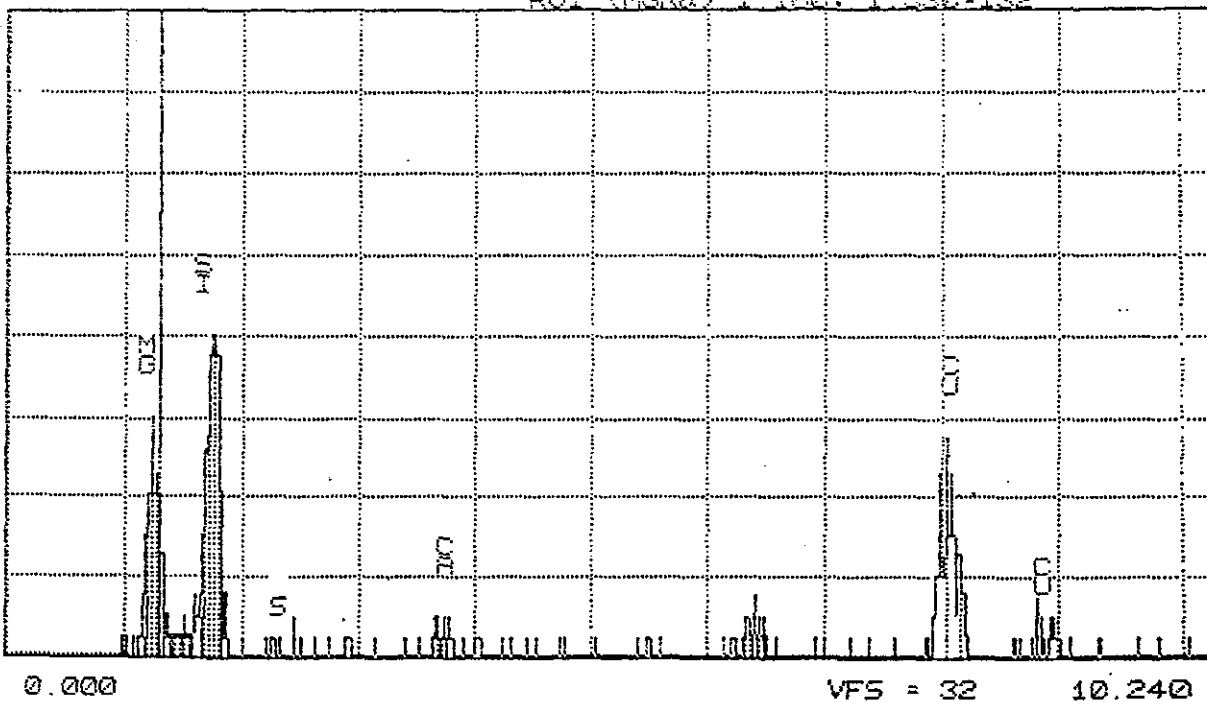
ROI (SIK α) 1.660: 1.810=115ROI (MGK α) 1.180: 1.330=87

8 M1811-78; CHRYSOTILE

MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 16:08

Cursor: 1.310keV = 7

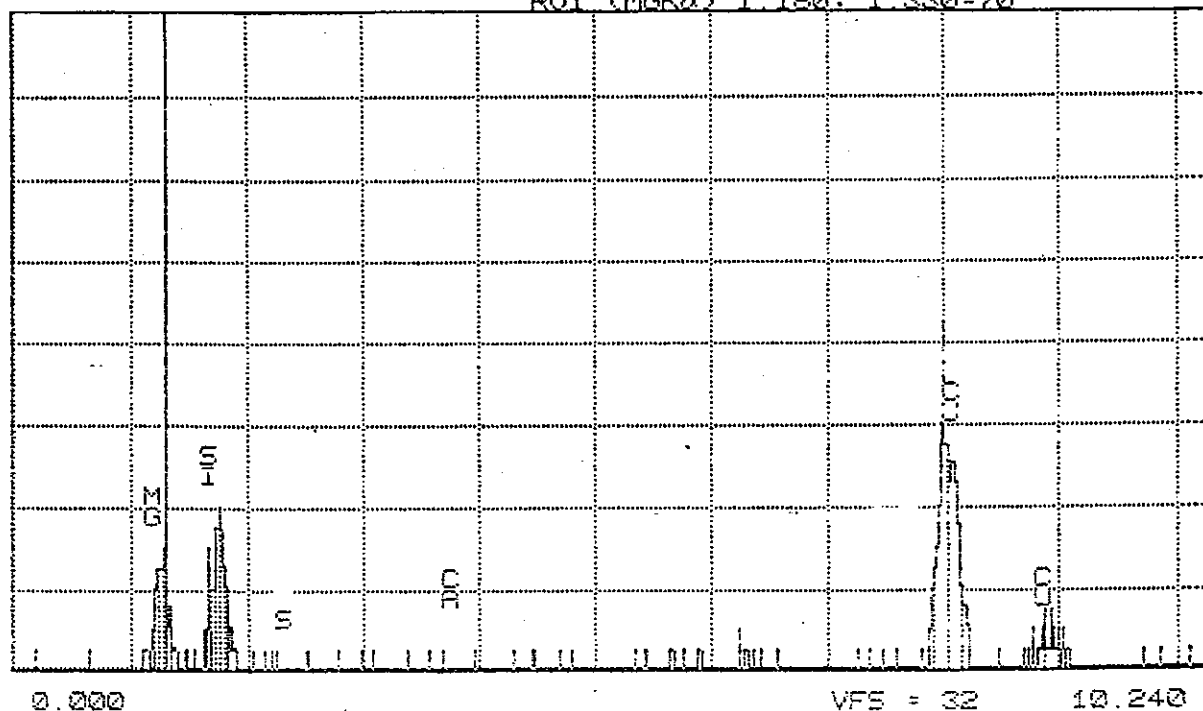
ROI (SIK α) 1.660: 1.810=189ROI (MGK α) 1.180: 1.330=132

3 M1811-78; CHRYSOTILE

MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 16:14

Cursor: 1.310keV = 5

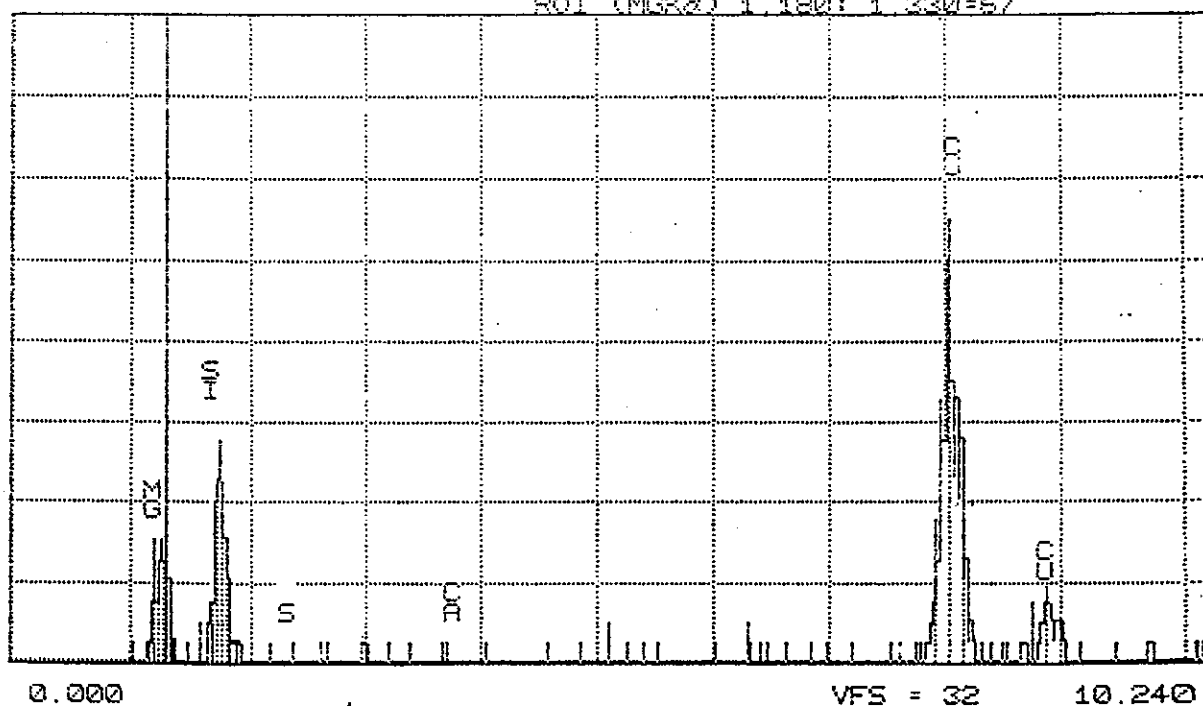
ROI (SIK α) 1.660: 1.810=92ROI (MGK α) 1.180: 1.330=70

13 M1811-48: CHRYSOTILE

MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 16:19

Cursor: 1.310keV = 2

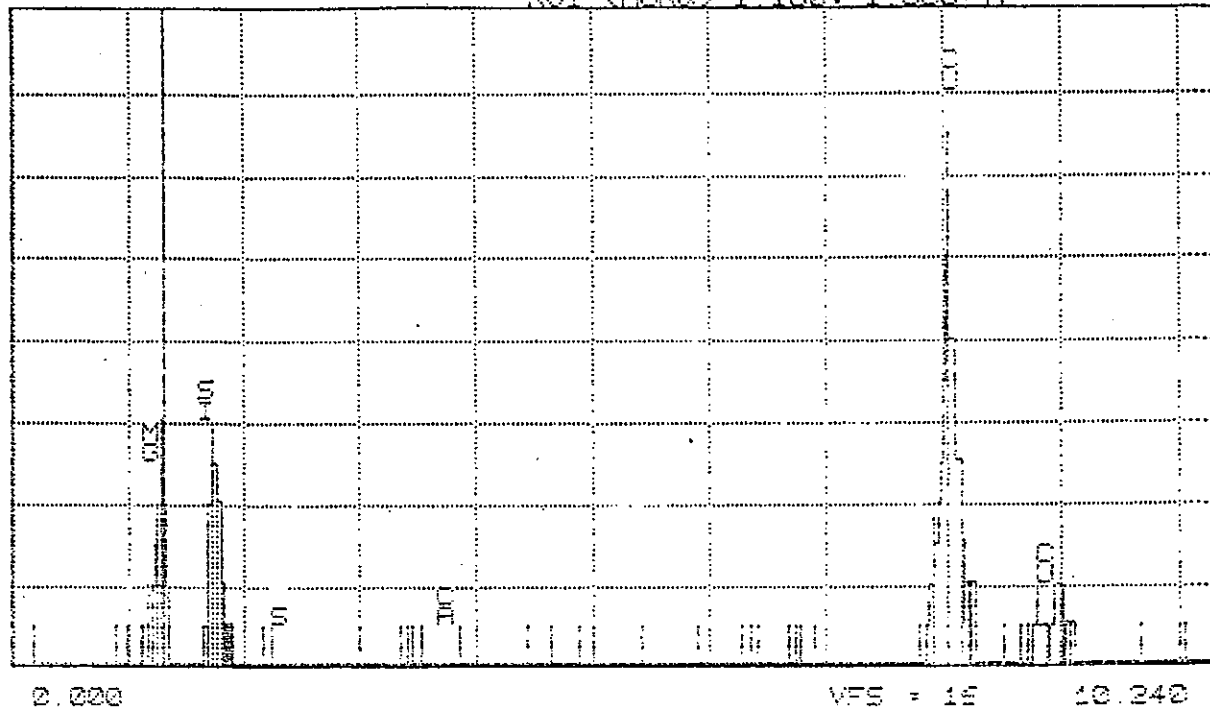
ROI (SIK α) 1.660: 1.810=100ROI (MGK α) 1.180: 1.330=67

11 M1811-46: CHRYSOTILE

MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 16:45

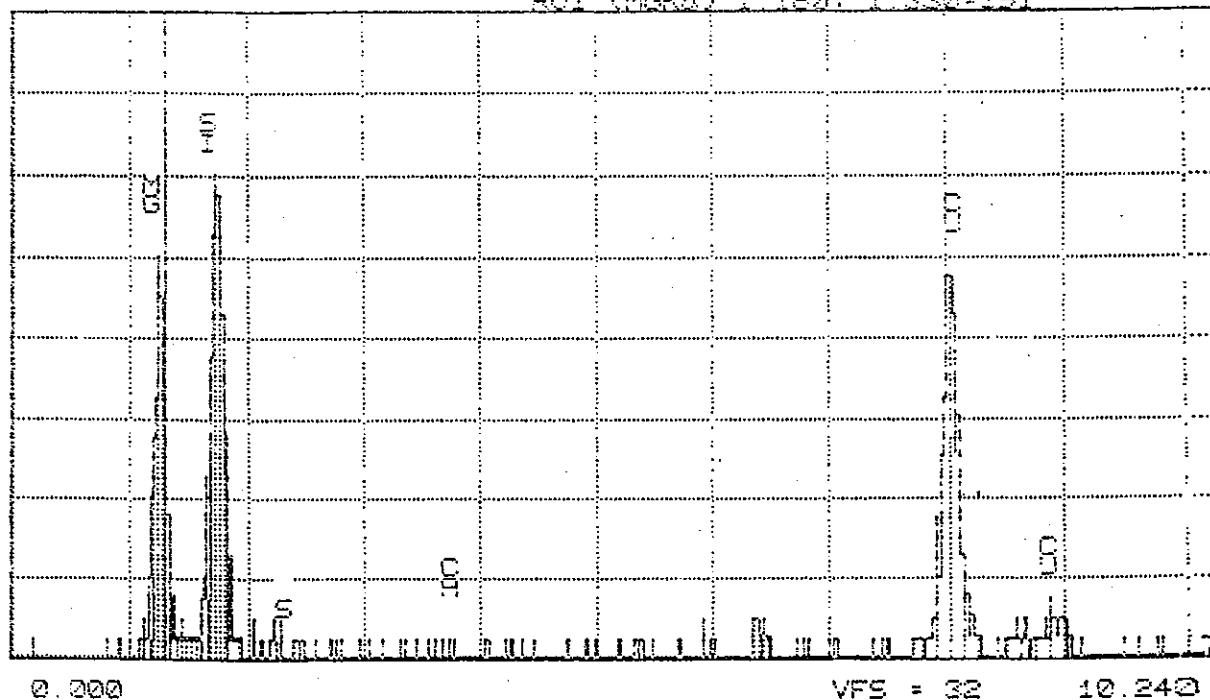
Cursor: 1.310keV = 1

ROI (SIK α) 1.660: 1.810=64ROI (MGK α) 1.180: 1.330=47

MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 16:52

Cursor: 1.310keV = 7

ROI (SIK α) 1.660: 1.810=263ROI (MGK α) 1.180: 1.330=191

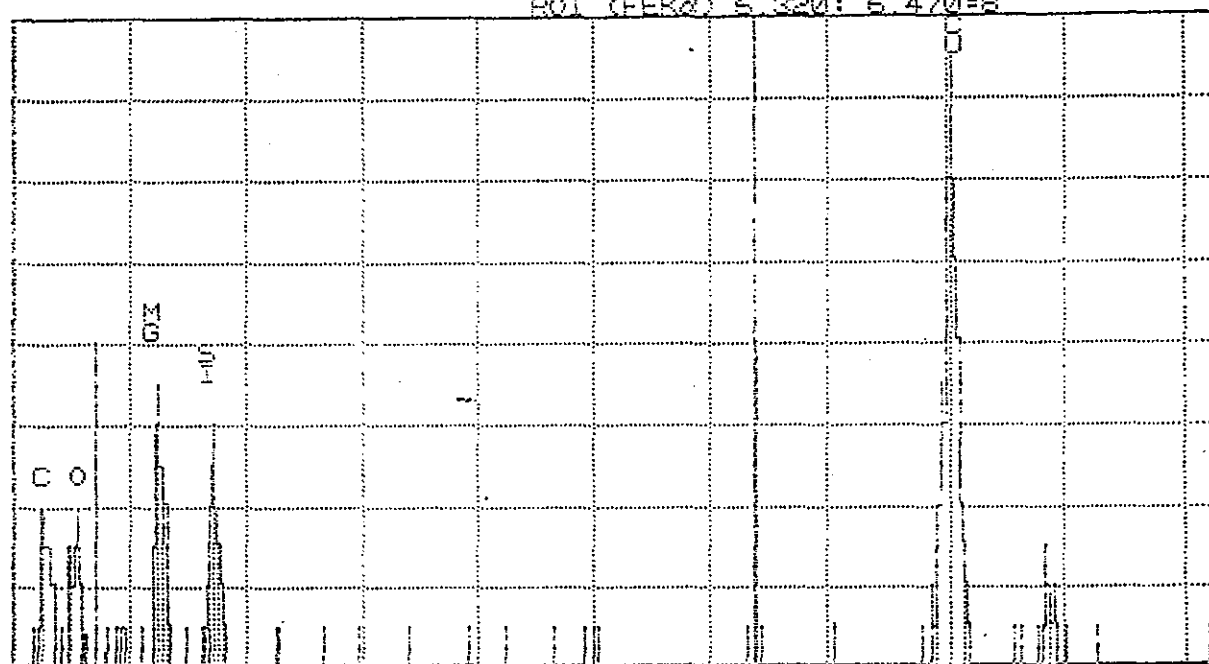
MATERIALS ANALYTICAL SERVICES

TUE 23-APR-96 15:02

Cursor: 6.380keV = 0

ROI (SiK α) 1.660: 1.810=57

ROI (FeK α) 6.320: 6.470=8



0.000 FE-26 K α = 6.40keV
9 M1811-9; CHRYSOTILE

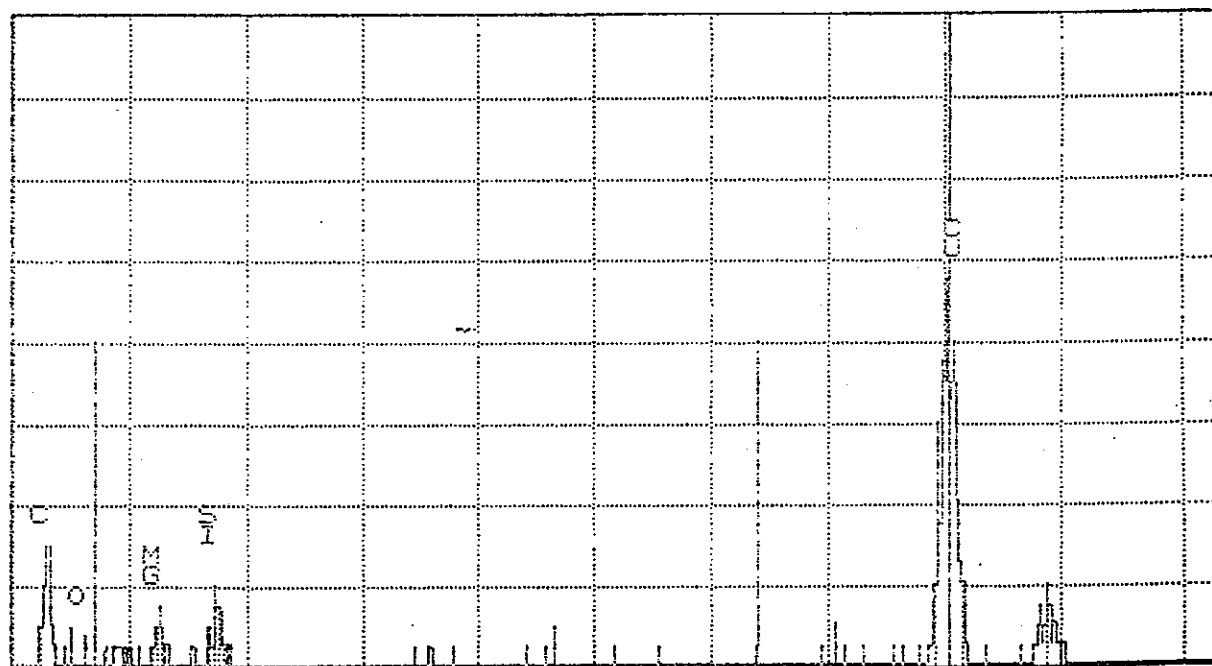
VFS = 15 10.240

MATERIALS ANALYTICAL SERVICES

WED 24-APR-96 10:18

Cursor: 8.040keV = 17

ROI (SiK α) 1.660: 1.810=36



0.000

FE-26

VFS = 32

10.240

1920

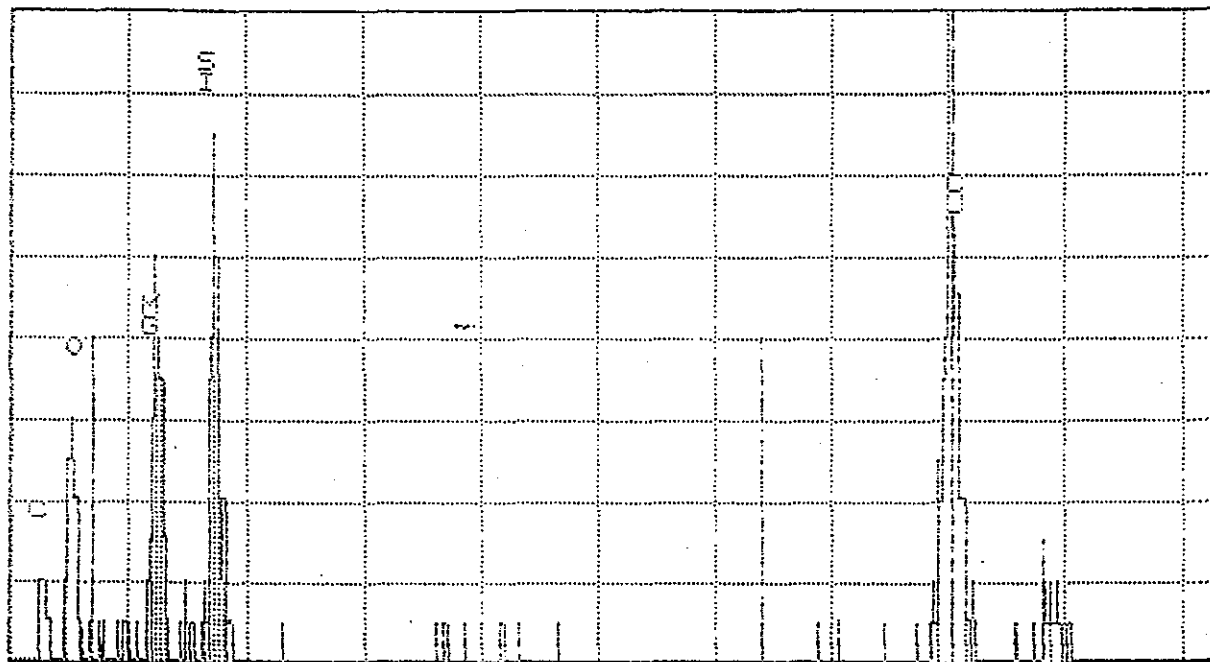
M1811-10; CHRYSOTILE

MATERIALS ANALYTICAL SERVICES

WED 24-APR-96 10:23

Cursor: 9.040keV = 12

ROI (SIKα) 1.660: 1.810=99



0.000

FE-26

VFS = 16

10.240

S

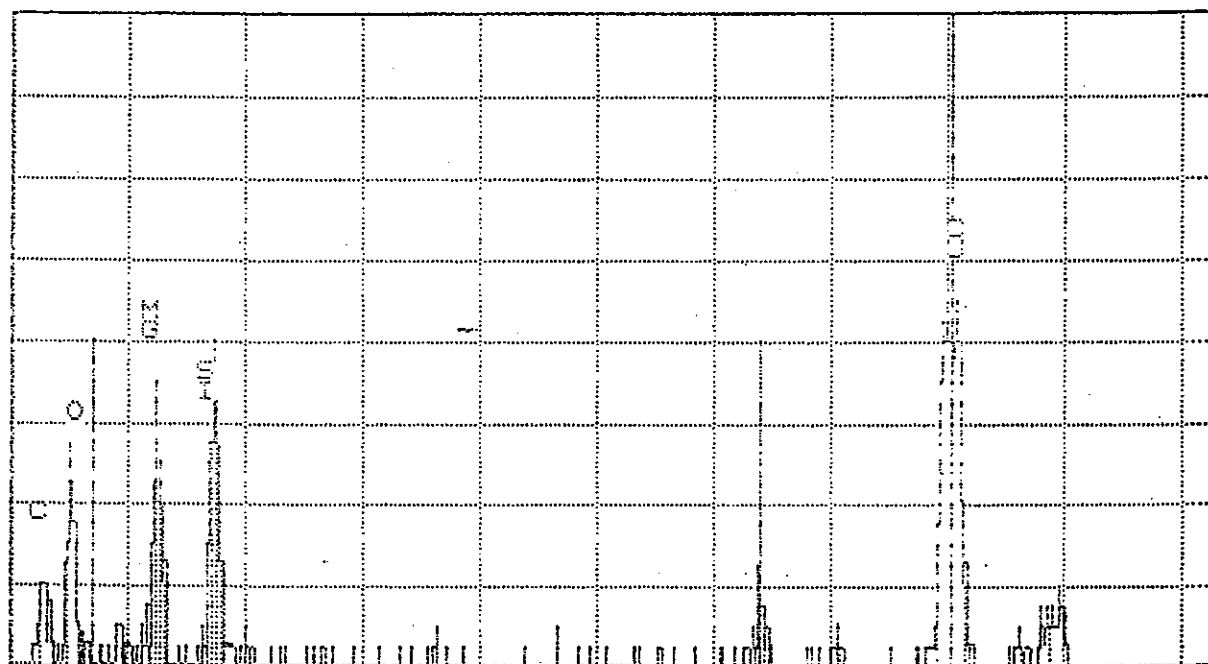
M1811-10; CHRYSOTILE

MATERIALS ANALYTICAL SERVICES

WED 24-APR-96 10:37

Cursor: 8.040keV = 16

ROI (SIKα) 1.660: 1.810=134



0.000

FE-26

VFS = 32

10.240

11

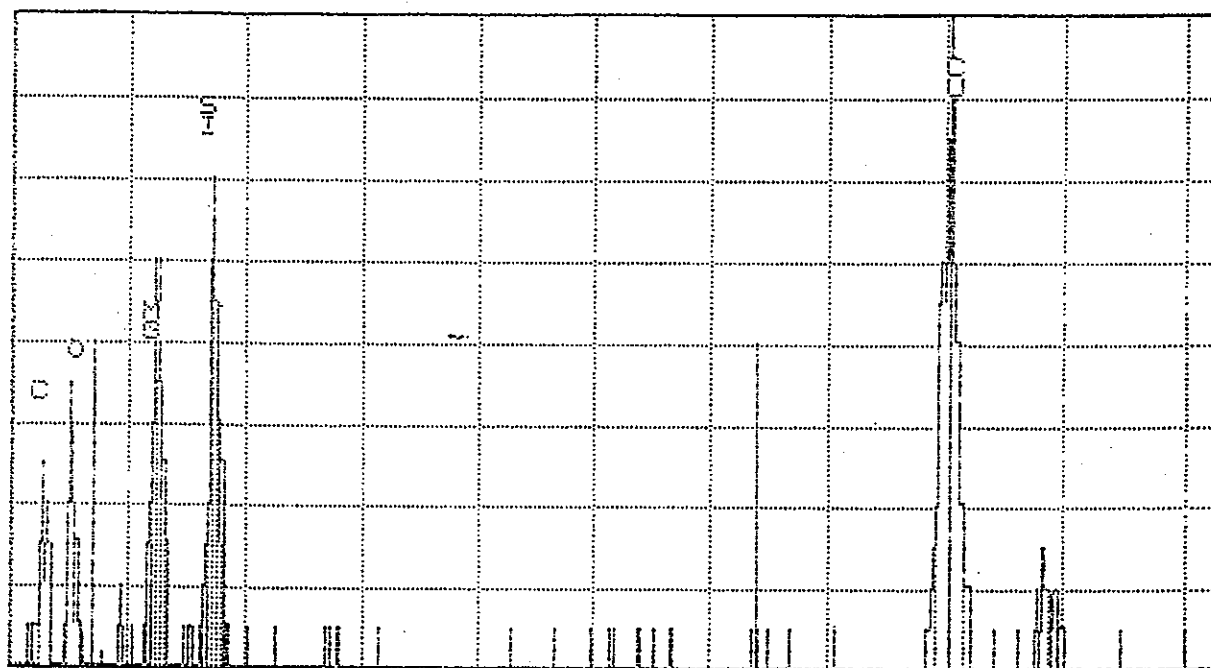
M1811-10; CHRYSOTILE

MATERIALS ANALYTICAL SERVICES

WED 24-APR-96 10:47

Cursor: 8.040keV = 14

ROI (SIK α) 1.660: 1.810=105



0.000

FE-26

VFS = 16

10.240

10

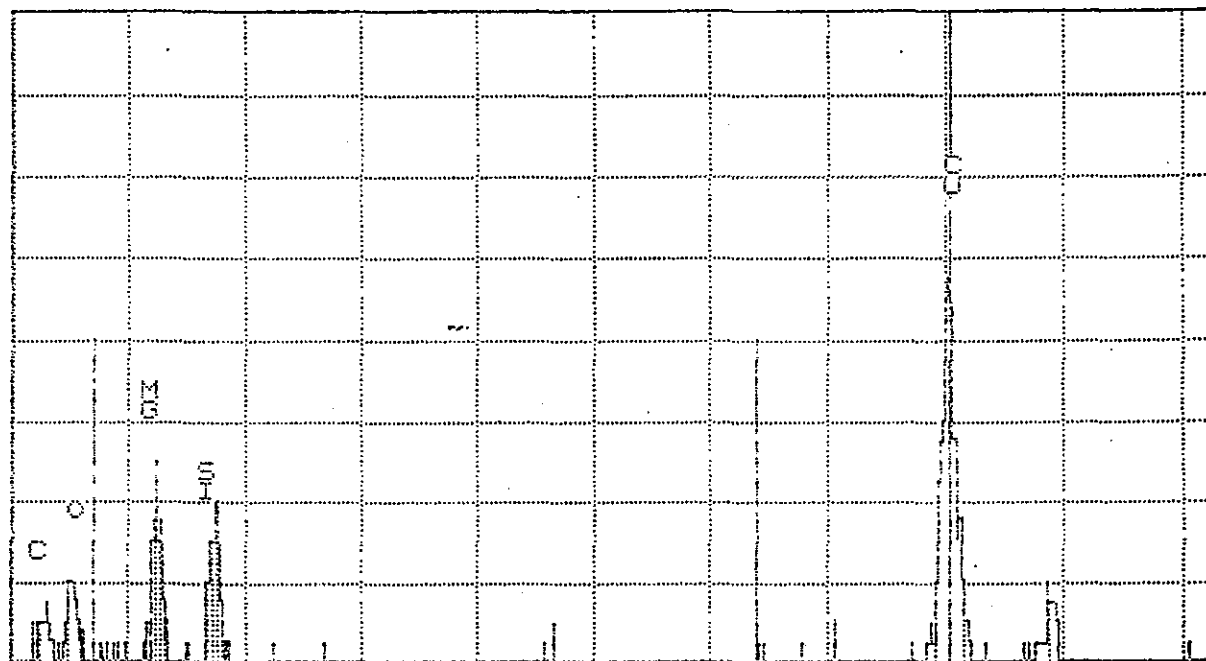
M1811-10; CHRYSOTILE

MATERIALS ANALYTICAL SERVICES

WED 24-APR-96 10:55

Cursor: 8.040keV = 17

ROI (SIKα) 1.660: 1.810=84



0.000

FE-26

VFS = 32

10.240

10

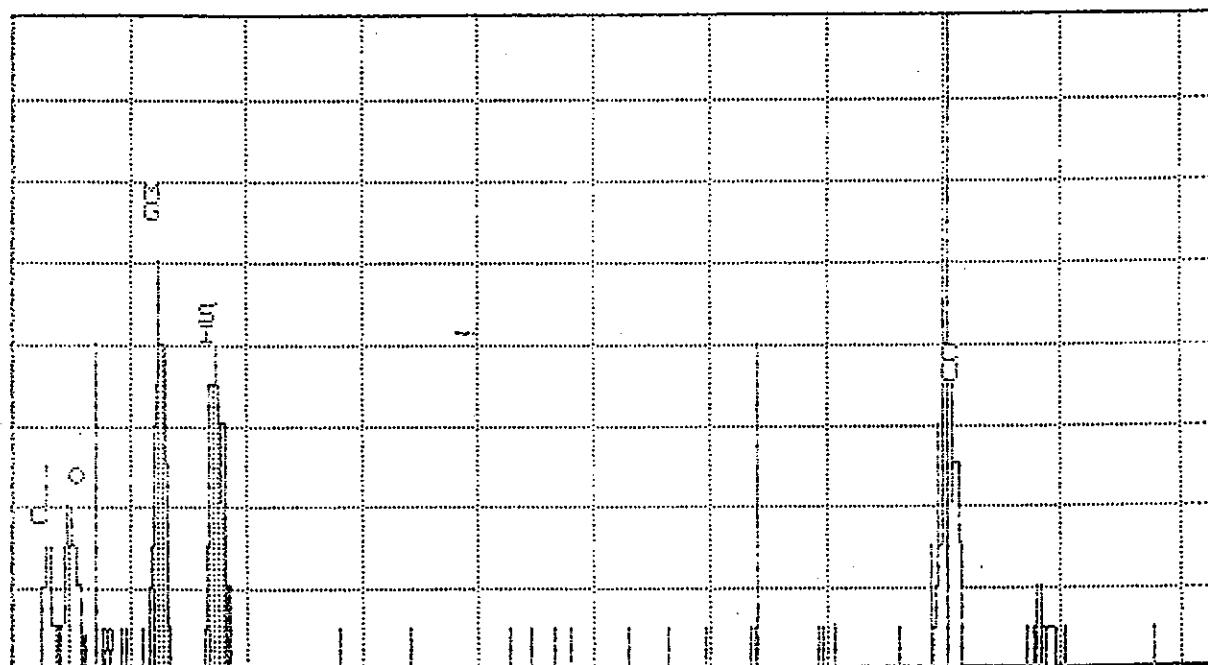
M1811-10; CHRYSOTILE

MATERIALS ANALYTICAL SERVICES

WED 24-APR-96 11:15

Cursor: 8.040keV = 4

ROI (SiK α) 1.660: 1.810=97



0.000

FE-26

VFS = 16

10.240

5

M1811-10; CHRYSOTILE

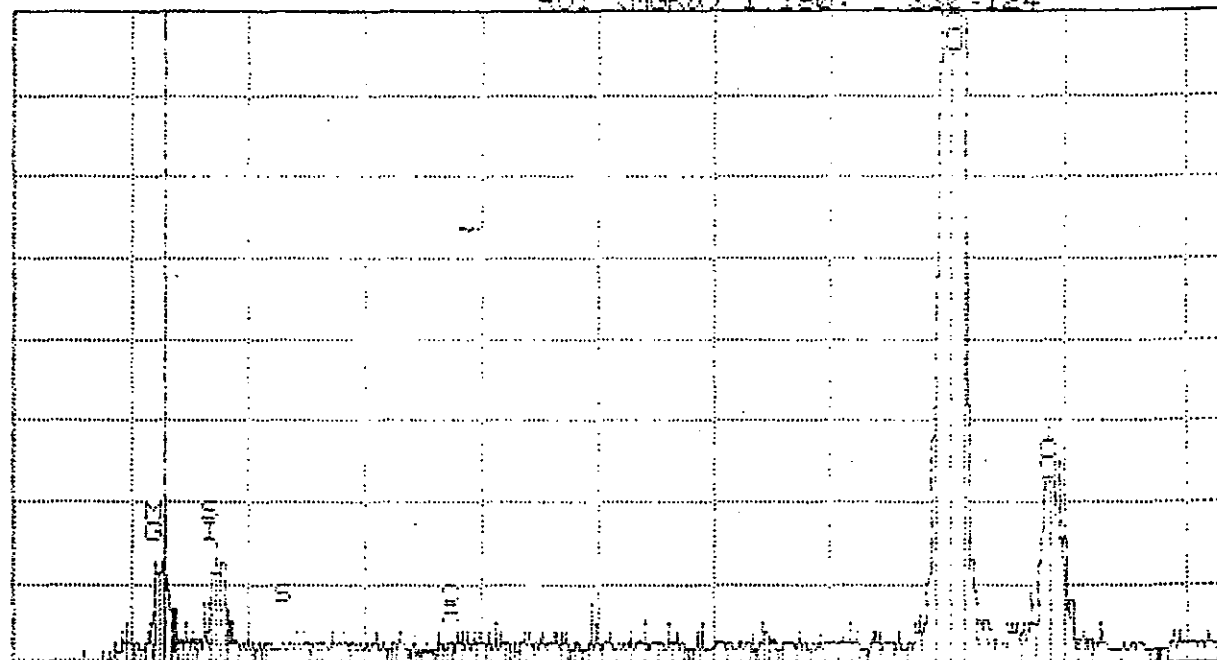
MATERIALS ANALYTICAL SERVICES

WEI 84-999-96 10:58

Cursor: 1.290keV = 5

ROI (SIK α) 1.860: 1.813=139

ROI (MGK α) 1.190: 1.332=124



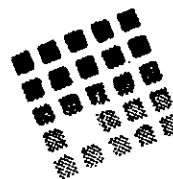
3 000

VPS = 54

10.240

31

M1811-11 : CHRYSOTILE



MATERIALS
ANALYTICAL
SERVICES

September 26, 1995

Mr. Richard Hatfield
Law Engineering
396 Plasters Avenue
Atlanta, Georgia 30324

Re: 1st Florida Tower (Tampa) - Microvac Dust Samples.

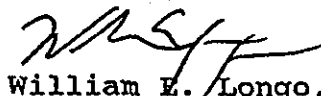
Dear Mr. Hatfield:

Enclosed are the analyses of the dust samples we received at our facility on September 14, 1995. The samples were sent under your job/purchase order number: 558-048-6101, 1st Florida Tower (Tampa), and were labelled:

1
2
3
4
5

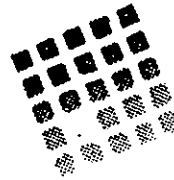
Please call our office at your convenience should you have any questions concerning the analyses of your samples.

Sincerely,


William E. Longo, Ph.D.
President

WEL:dab

Enc.
Ref:M13824



MATERIALS ANALYTICAL SERVICES, INC.
3597 PARKWAY LANE, SUITE 250
NORCROSS, GA 30092
(404) 448-3200

*Summary of Results of Analyses by
Transmission Electron Microscopy (TEM)*

Client Name: Law Engineering - Atlanta
Client Job Number/Name: 558-048-6101, 1st Florida Tower (Tampa)
MAS Project Number: M13824
Reviewer: REJ

Client Sample Number	MAS Sample Number	Sample Location	Number of Asbestos Structures	Asbestos Concentration Str/sq ft	Asbestos Concentration Str/cm ²
1	M13824-1	1st floor bank lobby, top of metal box above ceiling	30	12.0 Billion	12.9 Million
2	M13824-2	Basement, lobby area outside of old vault area, top of light fixture above ceiling	12	1.1 Billion	1.2 Million
3	M13824-3	35th floor, dining room area, top of 1' x 1' ceiling tile	20	36.8 Billion	39.7 Million
4	M13824-4	9th floor, top of metal air duct	18	32.8 Billion	35.5 Million
5	M13824-5	Field Blank	0	N/A	N/A

DUST SAMPLE ANALYSISDust Sampling Method: MICROVACSample ID: LAW ATLANTAAccelerating Voltage: 100 KVSample ID: 1Indicated Mag: 25 KXIAS Job Number: M 13824-1Screen Mag: 20 KXDate Sample Analyzed: 9-22-95Microscope Number: 1 2 3 4 5Number of Openings/Grids Counted: 1012Filter Type: LMCE PCGrid Accepted, Low Mag: Yes NoFilter Size: 25mm, 37mm, 47mmPercent Loading: 2 %Filter Pore Size (um): 0.145Grid Box #: 3496 3557Grid Opening: 1) 115 um x 115 um2) 116 um x 114 umAnalyst: M. M. M. M.Reviewer: H. M. M. M.**Calculation Data:**Counting Rules: AHERALEVEL IIEffective Filter Area in mm²:(A) 1297

Number of Grid Openings Examined:

(B) 10Average Grid Opening Area in mm²:(C) 0.013225

Total Volume of Original Suspension in ml:

(D) 100

Equivalent Volume of Original Suspension Filtered in ml:

(E) 0.02 (1:5000)Area Sampled in sq. ft. / cm²:(F) 0.123 sq. ft. 114 cm²

Total Number of Asbestos Structures Counted:

(G) 30Number of Asbestos Structures between 0.5 and 5 microns: 14 Structures ≥ 5 microns: 16**FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:**

$$\frac{A}{B} \times \frac{D}{C} \times \frac{1}{E} \times G = (\text{asbestos structures per sq.ft. or cm}^2)$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft.

1.196 x 10¹⁰Structures per cm²1.290 x 10⁷Results for Structures ≥ 5 microns:

Structures per sq.ft.

6.379 x 10⁹Structures per cm²6.882 x 10⁶

MAS JOB NUMBER:

M/3824-1

PAGE #

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STR. #	GRID # SQUARE #	TYPE	STRUCTURE	LENGTH MICRONS	WIDTH MICRONS	CONFIRMATION		
						MORPH.	SAED	EDS
1	D7-J2	C	B	12.0	0.7	—	—	p.o
2	I8	C	F	4.9	0.05	—	—	
3		C	F	6.3	0.05	—	—	
4		C	F	10.3	0.03	—	—	
5		C	F	3.7	0.1	—	—	
6		C	F	1.0	0.2	—	—	
7		C	B	5.0	0.3	—	—	
8	F8	C	F	9.0	0.1	—	—	
9		C	F	8.0	0.1	—	—	
10		C	C-F	6.4	0.1	—	—	p.o
11		C	F	7.0	0.1	—	—	
12		C	B	8.6	0.1	—	—	
13	D7	C	C-F	1.7	0.2	—	—	
14		C	F	1.3	0.05	—	—	
15		C	-F	3.3	0.1	—	—	
16		C	F	2.2	0.05	—	—	
17		C	F	0.9	0.05	—	—	
18	B4	C	F	1.2	0.05	—	—	
19		C	F	2.2	0.1	—	—	
20		C	F	8.0	0.1	—	—	p.o
21	E7-D2	C	M-B	1.3	0.2	—	—	
22	G3	C	B	12.0	0.2	—	—	
23		C	F	4.0	0.05	—	—	
24		C	F	5.9	0.05	—	—	
25		C	B	9.0	0.15	—	—	

KEYS TO ABBREVIATIONS USED ABOVE:

TYPE:

C = CHRYSOTILE
 AM = AMOSITE
 CR = CROCIDOLITE
 AC = ACTINOLITE
 TR = TREMOLITE
 AN = ANTHOPHYLLITE
 N = NON ASBESTOS

STRUCTURE:

F = FIBER
 B = BUNDLE
 C = CLUSTER
 M = MATRIX

OTHERS:

NSD = NO STRUCTURES DETECTED
 MORPH = MORPHOLOGY
 SAED = SELECTED AREA ELECTRON DIFFRACTION
 EDS = ENERGY DISPERSIVE X-RAY SPECTROSCOPY
 IR = INTERROW SPACING
 NP = NO PATTERN

[illegible]

DUST SAMPLE ANALYSISDust Sampling Method: MICROVACSample ID: LAW ATLANTAAccelerating Voltage: 100 KVSample ID: 2Indicated Mag: 20 KXAS Job Number: M 13824-2Screen Mag: 15.3 KXDate Sample Analyzed: 9-18-95Microscope Number: 1 2 3 4 5Number of Openings/Grids Counted: 101 2Filter Type: MCE PCGrid Accepted, Low Mag: Yes NoFilter Size: 25mm, 37mm, 47mmPercent Loading: 3 %Filter Pore Size (um): 0.145Grid Box #: 3496Grid Opening: 1) 113 um x 114 um2) 113 um x 112 umAnalyst: Hannigan
Reviewer: [Signature]**Calculation Data:**Counting Rules: AHERALEVEL IIEffective Filter Area in mm²: (A) 1297Number of Grid Openings Examined: (B) 10Average Grid Opening Area in mm²: (C) 0.012769Total Volume of Original Suspension in ml: (D) 100Equivalent Volume of Original Suspension Filtered in ml: (E) 0.11 (1:1000)Area Sampled in sq. ft. / cm²: (F) 0.1108 sq. ft. 100 cm²Total Number of Asbestos Structures Counted: (G) 12Number of Asbestos Structures between 0.5 and 5 microns: 11 Structures \geq 5 microns: 1**FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:**

$$\frac{A}{B} * \frac{D}{C} * \frac{1}{E} * G = (\text{asbestos structures per sq. ft. or cm}^2)$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft.

1.129 x 10⁹Structures per cm²1.219 x 10⁶Results for Structures \geq 5 microns:

Structures per sq. ft.

9.405 x 10⁷Structures per cm²1.016 x 10⁵

[illegible]

KEYS TO ABBREVIATIONS USED ABOVE:

TYPE :

C = CHRYSOTILE
AM = AMOSITE
CR = CROCIDOLITE
AC = ACTINOLITE
TR = TREMOLITE
AN = ANTHOPHYLLITE
N = NON ASBESTOS

STRUCTURE :

F = FIBER
B = BUNDLE
C = CLUSTER
M = MATRIX

OTHERS:

NSD = NO STRUCTURES DETECTED
MORPH = MORPHOLOGY
SAED = SELECTED AREA ELECTRON DIFFRACTION
EDS = ENERGY DISPERSIVE X-RAY SPECTROSCOPY
IR = INTERROW SPACING
NP = NO PATTERN

DUST SAMPLE ANALYSISDust Sampling Method: MICROVAC

Sample ID: LAW ATLANTA Accelerating Voltage: 100 KV
 IAS Job Number: M 13824-3 Indicated Mag: 20 KX
 Date Sample Analyzed: 9-22-95 Screen Mag: 1513 KX
 Number of Openings/Grids Counted: 101 2 Microscope Number: 1 2 3 4 5
 Grid Accepted, Low Mag: Yes No Filter Type: LMCE PC
 Percent Loading: 1 % Filter Size: 25mm, 37mm, 47mm
 Grid Box #: AT-3496 3557 Filter Pore Size (um): 0.145
 Grid Opening: 1) 113 um x 114 um
 2) 115 um x 115 um

Analyst: Hannon
 Reviewer: [Signature]

Calculation Data:Counting Rules: AHERA LEVEL II

Effective Filter Area in mm²: (A) 1297
 Number of Grid Openings Examined: (B) 10
 Average Grid Opening Area in mm²: (C) 0.013054
 Total Volume of Original Suspension in ml: (D) 100
 Equivalent Volume of Original Suspension Filtered in ml: (E) 0.1005 (1: 20,000)
 Area Sampled in sq. ft. / cm²: (F) 0.1108 sq. ft. 100 cm²
 Total Number of Asbestos Structures Counted: (G) 20

Number of Asbestos Structures between 0.5 and 5 microns: 13 Structures \geq 5 microns: 7**FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:**

$$\frac{A}{B} \times \frac{D}{C} \times \frac{1}{E} \times G = (\text{asbestos structures per sq. ft. or cm}^2)$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft. 3.1680 x 10¹⁰ Structures per cm² 3.4974 x 10⁷

Results for Structures \geq 5 microns:

Structures per sq. ft. 1.1288 x 10¹⁰ Structures per cm² 1.1391 x 10⁷

MAS JOB NUMBER:

M 13824-3

PAGE #

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STR. #	GRID # SQUARE #	TYPE	STRUCTURE	LENGTH MICRONS	WIDTH MICRONS	CONFIRMATION		
						MORPH.	SAED	EDS
1	A3 f8	C	M-f	710	0105	/	/	PD
2		C	M-f	110	0105	/	/	
3		C	M-f	515	0105	/	/	
4		C	f	215	0105	/	/	
	H7		NSD					
5	G5	C	f	115	0105	/	/	
6	F1	C	f	715	0105	/	/	
7	D3	C	M-f	115	0105	/	/	
8	A4-D8	C	M-B	515	013	/	/	
9		C	f	310	0105	/	/	
10		C	f	410	0105	/	/	PD
11		C	f	215	0105	/	/	
12	C5	C	f	210	0105	/	/	
13		C	f	1010	0105	/	/	
14		C	f	810	0105	/	/	
15	E2	C	M-f	1510	0105	/	/	
16		C	f	215	0105	/	/	
17	H4	C	C-f	210	0105	/	/	
18		C	f	410	0105	/	/	
19	I7	C	M-f	215	0105	/	/	
20		C	f	310	0105	/	/	PD

KEYS TO ABBREVIATIONS USED ABOVE:

TYPE:

C = CHRYSOTILE
 AM = AMOSITE
 CR = CROCIDOLITE
 AC = ACTINOLITE
 TR = TREMOLITE
 AN = ANTHOPHYLLITE
 N = NON ASBESTOS

STRUCTURE:

F = FIBER
 B = BUNDLE
 C = CLUSTER
 M = MATRIX

OTHERS:

NSD = NO STRUCTURES DETECTED
 MORPH = MORPHOLOGY
 SAED = SELECTED AREA ELECTRON DIFFRACTION
 EDS = ENERGY DISPERSIVE X-RAY SPECTROSCOPY
 IR = INTERROW SPACING
 NP = NO PATTERN

DUST SAMPLE ANALYSISDust Sampling Method: MICROVACHost: LAW ATLANTAAccelerating Voltage: 100 KVSample ID: 4Indicated Mag: 25 KXMAS Job Number: M 13824-4Screen Mag: 20 KXDate Sample Analyzed: 9.22.95Microscope Number: 1 2 3 4 5Number of Openings/Grids Counted: 1012Filter Type: LMCE PCGrid Accepted, Low Mag: Yes NoFilter Size: 25mm, 37mm, 47mmPercent Loading: 2 %Filter Pore Size (um): 0.145Grid Box #: 3496 3557Grid Opening: 1) 114 um x 114 um2) 116 um x 115 umAnalyst: M. M. M. M.
Reviewer: H. H. H. H.**Calculation Data:**Counting Rules: AHERA

LEVEL II

Effective Filter Area in mm²:(A) 1297

Number of Grid Openings Examined:

(B) 10Average Grid Opening Area in mm²:(C) 0.1013168

Total Volume of Original Suspension in ml:

(D) 100

Equivalent Volume of Original Suspension Filtered in ml: (E)

0.005 (1:20000)Area Sampled in sq. ft. / cm²:(F) 0.1108 sq. ft. 100 cm²

Total Number of Asbestos Structures Counted:

(G) 18Number of Asbestos Structures between 0.5 and 5 microns: 8 Structures ≥ 5 microns: 10**FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:**

$$\frac{A}{B} * \frac{D}{C} * \frac{1}{E} * G = (\text{asbestos structures per sq.ft. or cm}^2)$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft.
3.283 x 10¹⁰Structures per cm²
3.546 x 10⁷Results for Structures ≥ 5 microns:Structures per sq.ft.
1.824 x 10¹⁰Structures per cm²
1.970 x 10⁷

MAS JOB NUMBER:

M/3824-4

PAGE #

111

STR. #	GRID # SQUARE #	TYPE	STRUCTURE	LENGTH MICRONS	WIDTH MICRONS	CONFIRMATION		
						MORPH.	SAED	EDS
	C4-E7		NSD					
1	C6	C	F	1.6	0.05	—	—	P.O.
2		C	M-F	4.0	0.1	—	—	
3	D2	C	F	0.7	0.04	—	—	
4		C	F	0.9	0.1	—	—	
5		C	B	13.0	0.1	—	—	
6		C	F	6.0	0.1	—	—	
7	G2	C	M-B	6.0	0.4	—	—	
8		C	F	1.0	0.15	—	—	
9		C	F	6.0	0.1	—	—	
10		C	M-F	8.0	0.05	—	—	P.O.
11	F7	C	M-B	42.0	0.2	—	—	
12	D4-D2	C	F	5.7	0.05	—	—	
13		C	F	5.3	0.05	—	—	
	F4		NSD					
14	H7	C	B	6.2	0.15	—	—	
15		C	B	14.0	0.05	—	—	
16		C	F	2.6	0.1	—	—	
	G9		NSD					
17	B6	C	B	2.0	0.2	—	—	
18		C	F	1.7	0.05	—	—	

KEYS TO ABBREVIATIONS USED ABOVE:

TYPE:

C = CHRYSOTILE
 AM = AMOSITE
 CR = CROCIDOLITE
 AC = ACTINOLITE
 TR = TREMOLITE
 AN = ANTHOPHYLLITE
 N = NON ASBESTOS

STRUCTURE:

F = FIBER
 B = BUNDLE
 C = CLUSTER
 M = MATRIX

OTHERS:

NSD = NO STRUCTURES DETECTED
 MORPH = MORPHOLOGY
 SAED = SELECTED AREA ELECTRON DIFFRACTION
 EDS = ENERGY DISPERSIVE X-RAY SPECTROSCOPY
 IR = INTERROW SPACING
 NP = NO PATTERN

DUST SAMPLE ANALYSISDust Sampling Method: MICROVAC

Sample ID: LAW ATLANTA Accelerating Voltage: 100 KV
 Sample ID: 5 BLANK Indicated Mag: 20 IX
 IAS Job Number: M 13824-5 Screen Mag: 1513 IX
 Date Sample Analyzed: 9-18-95 Microscope Number: 1 2 3 4 15
 Number of Openings/Grids Counted: 10, 2 Filter Type: LMCE PC
 Grid Accepted, Low Mag: Yes No Filter Size: 25mm, 37mm, 47mm
 Percent Loading: 41 % Filter Pore Size (um): 0.145
 Grid Box #: 3496 Grid Opening: 1) 113 um x 115 um
 2) 114 um x 114 um

Analyst: H. Harrison
 Reviewer: M. M. M. M.

Calculation Data:Counting Rules: AHERA LEVEL II

Effective Filter Area in mm²: (A) 1297
 Number of Grid Openings Examined: (B) 10
 Average Grid Opening Area in mm²: (C) 0.012996
 Total Volume of Original Suspension in ml: (D) 100
 Equivalent Volume of Original Suspension Filtered in ml: (E) 30 (1:3.33)
 Area Sampled in sq. ft. / cm²: (F) -0- sq. ft. -0- cm²
 Total Number of Asbestos Structures Counted: (G) 0

Number of Asbestos Structures between 0.5 and 5 microns: 0 Structures \geq 5 microns: 0**FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES PER SQ. FT. AND PER CM²:**

$$\frac{A}{B} * \frac{C}{D} * \frac{1}{E} * G = (\text{asbestos structures per sq. ft. or cm}^2)$$

CONVERSIONS:

$$\frac{\text{Area in cm}^2}{929.03} = \text{sq. ft.}$$

$$\text{Area in sq. ft.} \times 929.03 = \text{cm}^2$$

Results for Total Asbestos Structures:

Structures per sq. ft. 0Structures per cm² 0Results for Structures \geq 5 microns:Structures per sq. ft. 0Structures per cm² 0

MATERIALS ANALYTICAL SERVICES, INC.
3597 PARKWAY LANE, SUITE 250
NORCROSS, GEORGIA 30092
(404) 448-3200

CHAIN-OF-CUSTODY

Page 1 of 1

Client: LAW ENG/ATL MAS Job #: M13824
Contact: Richard L. Hatfield Date Recd: 09/14/95
Phone No: (404)-873-4761 Client P.O.: 558-048-6101

TYPE OF ANALYSIS

Type : MicroVac Requested T.A.T.: N/A
Method: Dust Due Date: 09/12/15

Sample Number(s):

1) 1	114	cm2
2) 2	100	cm2
3) 3	100	cm2
4) 4	100	cm2
5) 5 FIELD BLANK	0	cm2

Samples Relinquished By: Classic courier
Samples Received By: denise mazzaferro for Time: 09:19
Condition of Samples: good
Client Docs: COC
Init File Rev: dmazzaferro
Sample Prep By: dmazzaferro Date: 9-14-95
Sample Analysis: M. White & L. L. L. L. L. Date: 9-18-95 9-22-95
Report(s) Sent By: / Date:
Sample(s) Ret. By: Date:

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Sample Prep By: denise mazzaferro Date: 9-14-95
Sample Analysis: M. Mazzaferro & Associates Date: 9-18-95 9-22-95
Report(s) Sent By: 1 Date: _____
Sample(s) Ret. By: _____ Date: _____



LAW

ENGINEERING AND ENVIRONMENTAL SERVICES

SURFACE DUST SAMPLE LOG

1ST FLORIDA TOWER (TAMPA) LAW ENGINEERING PROJECT NO. 558-048-6101

Samples Taken By: Richard L. Hatfield
Date of Visit: 09/11/95

<u>Sample No.</u>	<u>Location</u>	<u>Area</u>
1	1st floor bank lobby, top of metal box above ceiling	12cm x 9.5cm
2	Basement, lobby area outside of old vault area, top of light fixture above ceiling	10cm x 10cm
3	35th floor, dining room area, top of 1' x 1' ceiling tile	10cm x 10cm
4	9th floor, top of metal air duct	10cm x 10cm
5	Field Blank	

Date of Transfer: 09/14/95
Transfer to: Materials Analytical Services
Transfer by: Gabrielle R. Johnson per Richard L. Hatfield
Delivered by: A Classic Courier

6101dust.doc

*Received
9-14-95
D. Magagnoli
m13824*

LAW ENGINEERING, INC.

396 PLASTERS AVENUE, N.E. • ATLANTA, GA 30324
(404) 873-4761 • FAX (404) 881-0508

ONE OF THE LAW COMPANIES



MATERIALS
ANALYTICAL
SERVICES

SAMPLE CASSETTE LABEL DATA

MAS PROJECT NUMBER: M13824

PREPARED BY: Amazzaferro

MAS SAMPLE NO.

DATA

M13824-1 #1 1st Florida Towers 1st Floor
Book lobby
Top of metal box above ceiling
BLH 12cm x 9.5cm

M13824-2 #2 1st Florida Tower Basement
Top of light fixture
10cm x 10cm

M13824-3 #3 1st Florida Tower 35th Floor
Top of 1x1 Ceiling Tile
BLH 9/11/95 10cm x 10cm

M13824-4 #4 1st Florida Tower 9th Flr.
Top of Duct
BLH 9/11/95 10x10cm

M13824-5 #5 1st Florida Towers
Field Blank